

# On the cover:

At Echo Bay, we grow by
expanding our search for gold
to the Americas and beyond.
Wherever we go, we take
with us our respect for the
dignity of the Family of Man,
our commitment to
protect and enhance our
environment, and our belief in
the value of making a lasting
economic, educational
and cultural contribution to the
communities where, together,
we create wealth by mining gold
from the earth.

# Our mark:

Echo Bay's new logo represents the ethical core at the heart of everything we do.



#### Contents

- 1 Letter to Shareholders
- 5 How We Grow
- 6 Aquarius
- 9 Paredones Amarillos
- 12 Kingking
- 14 Santa Elina
- 16 Promising Prospects
- 19 How We Mine
- 20 McCoy/Cove
- 23 Round Mountain
- 26 Lupin
- 28 Kettle River
- 30 "Jewelry Underpins the Gold Price" by Timothy Green

- 33 Financial Statements and Review
- 55 Selected Financial Data
- 56 Ore Reserves and
  Other Mineralization
- 58 Operating Data
- 61 Glossary
- 63 Shareholder Information
- 64 Directors and Officers
- 65 How We Leave



We are producing gold at four mines in North America.

We plan to build two new gold mines, one in Canada and one in Mexico.

We are completing feasibility studies on
five important projects around the world.

And we have 29 other projects in our "project pipeline"
in various stages of exploration and development.

- ▲ gold producing mines
- new gold mines planned
- exploration/development properties

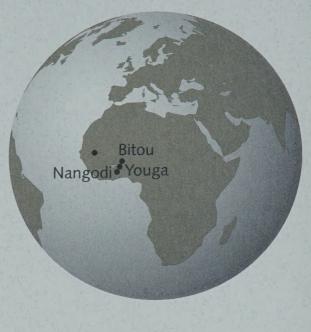
# Highlights

- Our 1996 net loss included special one-time charges totaling \$107 million:
  - \$77 million to write off the Alaska-Juneau project page 3
  - \$30 million for waste rock stabilization at McCoy/Cove page 3
- 1996 gold production increased to 768,919 ounces better than our target of 725-750,000 ounces page 3
- We plan to bring two new gold mines into production: Aquarius in Canada and Paredones Amarillos in Mexico pages 6-11
- We are advancing 34 other projects around the world in various stages of exploration and development pages 12-18

	1996	1995
Financial Results (U.S. dollars)	Carlotte Comment	
Revenue (millions)	\$ 337.3	\$ 360.7
Net loss (millions):		
Before special one-time charges <sup>1</sup>	\$ (69.6)	\$ (50.1)
After special one-time charges <sup>1</sup>	\$(176.7)	\$ (50.1)
Net loss per share:		
Before special one-time charges <sup>1</sup>	\$ (0.52)	\$ (0.43)
After special one-time charges <sup>1</sup>	\$ (1.31)	\$ (0.43)
Production (ounces)	***	
Gold	768,919	754,762
Silver	7,102,348	11,905,806
Ore Reserves (ounces)		
Gold <sup>2</sup>	8,573,000	10,983,000
Silver	53,858,000	62,913,000
Other	A STATE OF THE STA	
Shares outstanding (millions):		
Weighted average	134.4	116.2
Year-end Year-end	139.4	129.9
Number of shareholders	65,000	66,200
Number of employees	2,281	1,987

<sup>&</sup>lt;sup>1</sup>One-time charges totaled \$107.1 million in 1996, including \$77.1 million to write off the Alaska-Juneau development property and \$30.0 million for waste rock stabilization at the McCoy/Cove mine.

We make projections of various kinds throughout this annual report. For a discussion of forward-looking statements and related risk factors, please see page 60.





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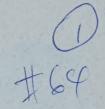
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ration and development.

<sup>&</sup>lt;sup>2</sup>The 1996 reserves are after removing 3,442,000 ounces associated with the Alaska-Juneau project.

Fellow Shareholder:



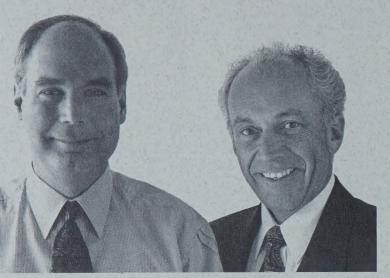
How do we grow?

Our commitment is to responsible mining first and foremost.

We are also committed to growth in gold reserves and production. We intend to produce more gold at a lower cost per ounce, in order to improve returns to shareholders.

We lost money in 1996. There are two main reasons for this. First, we are *investing* for the future— more than \$63 million in 1996—in exploration and development projects that we believe will provide expanded reserves and production in future periods.

Second, we took *special one-time charges* totaling \$107 million to write off the Alaska-Juneau project in Alaska and to



Richard C. Kraus
President and
Chief Executive Officer

Robert L. Leclerc Chairman

solve a waste rock instability problem at our McCoy/Cove mine in Nevada.

These two factors, when combined with the increased costs of mining deeper levels at the McCoy/Cove and Lupin mines, resulted in a 1996 net loss of \$177 million, or \$1.31 per share.

# Cash Position

Despite the loss, we had \$103 million in cash holdings at year's end. In January 1997, we also received an additional \$63 million in cash by closing out our entire gold and silver forward sales position, taking advantage of the decline in precious metals prices to three-year lows.

We have not changed the company's hedging policy. Our gold and silver forward sales position was replaced with gold and silver put options and call options.

# Building for the Future

We plan to bring two new gold mines into production, Aquarius in Canada and Paredones Amarillos in Mexico. The decision to proceed with both projects is contingent on arrangement of satisfactory financing.

The two new mines will together produce about 240-250,000 ounces of annual gold production for Echo Bay's account.

Both new mines are targeted for startup in late 1998. Full-scale commercial production is expected by early 1999.

# Two Million Ounces of Gold

The new mines added two million ounces of gold to Echo Bay's ore reserves at year-end 1996. We believe there is excellent potential to increase reserves as exploration continues on these properties.

To bring both new mines into production will require an investment by Echo Bay of \$167 million over the coming two years. We intend to finance Aquarius with a new \$75 million unsecured credit facility. We plan to finance Paredones Amarillos with a \$36 million non-recourse project loan.

'Most of the remaining funds will come from cash on hand and operating cash flow from our four existing gold mines.

# Dividend Policy Change

In addition, we announced in January that we are suspending payment of dividends on our common shares. This will save about \$21 million over the next two years for mine development.

We believe that shareholder interests are best served by using our cash resources to build a foundation for sustained future value rather than making short-term cash payouts at this time.

# Write-Off of Alaska-Juneau

The biggest single charge against 1996 earnings was the \$77 million write-off of the Alaska-Juneau (A-J) project.

To have brought the A-J into production would have required an additional investment exceeding \$300 million over the next four years. We intend to invest the company's resources instead in Aquarius, Paredones Amarillos and other more promising projects.

Going forward, we intend to realize better growth and greater value for our shareholders from our assets. We believe we can achieve this by concentrating our efforts and resources on higher-quality, lower-cost gold mines.

At year-end 1996, we wrote off our entire remaining investment in the A-J, \$57 million, and established a reserve of \$20 million for estimated reclamation and closure responsibilities. A-I's ore reserves and other mineralization were eliminated from Echo Bay's total gold resources at year-end 1996.

# Pit Wall Stabilization at McCoy/Cove

The \$30 million provision for waste rock stabilization at the McCoy/Cove mine is to cover the estimated costs of stabilizing a portion of the open pit wall.

The instability has had no effect on production or reserves, and no future effect is anticipated. Existing ore stockpiles, together with ore to be mined from other areas of the pit, will provide ample ore until stabilization of this area is completed in 1998.

# **Optimizing Current Operations**

1996 gold production increased to 768,919 ounces — better than our target of 725-750,000 ounces.

We continue to make the most of our producing mines. At McCoy/Cove, we completed a mill expansion in April. At Round Mountain, a mill is under construction for startup in late 1997. At Lupin, we are developing a satellite deposit at Ulu. At Kettle River, we achieved full production in January from our sixth deposit, K-2. Full details are given in the operations review on pages 19-29.

All of the cash flow generated by our four producing gold mines is being reinvested in exploration and development projects.

# Transition from Four Producing Mines To a Portfolio of Opportunities

In addition to our four producing gold mines and two new mines to be constructed, the momentum of our extensive work in 1996 will carry us through to completion of feasibility studies in 1997 on five important projects around the world: Kingking, Chapada, São Francisco, Fazenda Nova and São Vicente. We also have 29 other projects in our "project pipeline" in various stages of exploration and development.

As we bring these projects along, we focus and refocus our efforts on those with the greatest potential. We have fewer but better projects today than a year ago — a portfolio of opportunities lesser in quantity but greater in quality. A year from now, we will have upgraded the portfolio still further.

Our central interest is gold. We will mine other metals only as they come along with gold.

# Promising Prospects in Brazil

Through our strategic alliance with Santa Elina Gold Corporation, we have a number of promising projects in Brazil - and we

control one of the largest and most prospective land positions in South America. We increased our ownership of Santa Elina to 51% from 7% in 1996.

We are currently completing feasibility studies on the first four projects we have examined in Brazil: Chapada, São Francisco, Fazenda Nova, and São Vicente. We will not make any decisions until we complete our technical work later in 1997, but we are encouraged by the potential of these projects. On pages 14-15, you will see what we mean.

# Potential in the Philippines

We are also currently completing a feasibility study on the Kingking copper-gold deposit in the Philippines. In recent months, we have focused most of our exploration drilling on areas where earlier work suggested we would find material richer in gold and leaner in copper.

We have found some higher-grade gold values, but the results of our drilling are not yet definitive. Again, we will make no decisions until we complete our full exploration drilling program and all of the technical work needed to tell us what our next step should be. An updated report appears on pages 12-13.

# Strategic Alliance Success

Paredones Amarillos represents one of the first returns to the company of our aggressive program of establishing strategic alliances with key explorationists around the world. Today, we have strong strategic alliances in Mexico, Brazil, the Philippines, Peru, Africa and elsewhere.

We are excited by what we are finding at a number of exploration projects. Among the most promising are Dolores in Mexico, Kilgore in Idaho, and three adjacent properties in West Africa — Youga and Bitou in Burkina Faso, and Nangodi across the border in Ghana. A report is on pages 16-18.

# Former Chairman Retires

Robert F. Calman retired as Chairman and a Director of Echo Bay in 1996. He had been Chairman since 1980. We recognize with gratitude his 16 years of dedicated service and wise counsel.

# Outlook

In 1997, our target production levels are 700-725,000 ounces of gold and seven million ounces of silver. Our cash operating cost target is \$265-\$275 per ounce of gold.

In 1998, we aim to be starting up two new gold mines. In addition, we have a large number of projects in various stages of exploration and development around the world, and we expect to be advancing the most promising of them toward production by that time.

We are prepared and poised for growth. We look forward with confidence.

Robert L. Leclerc, Q.C.

Bulord C Krous

Chairman

Richard C. Kraus

President and Chief Executive Officer

March 1, 1997

# How We Grow

We grow by bringing *new gold mines* into production around the world.

Over the past four years, we have constructed a "pipeline" of projects in various stages of exploration and development.

Some of these prospects won't prove up. They'll be dropped. Others will be added.

We plan to build *two new mines* in 1997-98, one in Canada and one in Mexico. Others will follow.

Wherever we go around the world, we take with us *our high standards* of environmental protection, community contribution and good corporate citizenship.

# Aquarius

The Aquarius project, located in the prolific Timmins gold district of Ontario, is one of the first results of the aggressive acquisition, exploration and development program that we instituted two years ago.

# **Construction Go-Ahead**

A feasibility study was completed on Aquarius in late 1996. Based on the results of this extensive work, the decision to bring the project into production was made in January 1997.

This computer-drawn three-dimensional view of the Aquarius site shows the location of the underground freeze wall around the perimeter of the pit. This is a new use for an old technology, and is both cost-effective and environmentally friendly.

Efforts are already moving ahead toward our goal of beginning mining in late 1998 and achieving commercial production in early 1999. The \$100 million project is expected to average 166,000 ounces of gold production per year.

# Reserves

Aquarius is a very nuggety deposit, which is common in the Timmins mining district. During 1996, we completed over 148,600 feet (45,300 meters) of drilling. This was done to provide a high level of confidence in our understanding of the ore body's grade. An extensive grade evaluation resulted in the identification of 1.3 million ounces of gold reserves. If no more reserves are ever found at the site (which is unlikely — the exploration potential is excellent), then the project's life would be seven years.

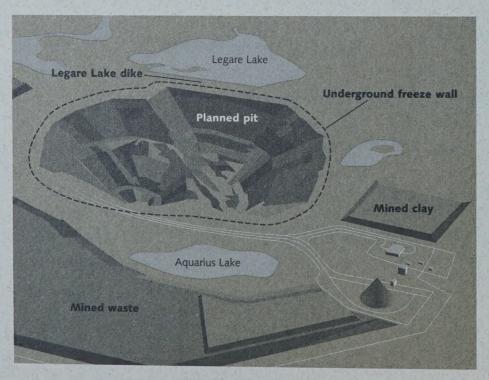


The potential to find more gold at Aquarius is excellent.
Drill targets have already been identified for 1997. Here, driller's helper Marc Tremblay is completing a 1996 drill hole.

# Freezing the Water

Significant work was completed during the year to address the challenges presented by large quantities of subsurface water in this area of many lakes. Instead of traditional pumping, which is costly, Aquarius will apply old technology in a new way. We will control the water flow through freezing.

Freezing is a technology that has been used in tunneling and shaft boring for over 100 years.



At Aquarius, a ring of ground outside the perimeter of the pit will be frozen. Refrigeration stations will circulate super-cooled brine (salt water) through a series of pipes from surface to bedrock, freezing the ground. The water within the "freeze wall" perimeter will then be pumped out. The impermeable barrier of frozen ground will act to redirect subsurface water away from the pit—virtually eliminating the need for further pumping.

Once established, the freeze wall can be maintained for the life of the mine at considerably less cost than continuously pumping water out of the pit. And the water levels of the nearby lakes will be protected.

# **Operations**

Open pit mining methods will supply up to 7,500 metric tonnes of ore per day to the mill. After crushing and grinding, a gravity circuit will recover the high-grade nuggets of gold. This circuit uses gold's high specific gravity to separate it from the host rock — a modern version of panning for gold.

The remaining gold will be recovered in a carbon-in-pulp mill circuit. In this circuit, the gold particles in the host rock are dissolved when the proper chemicals are added. Carbon is circulated with the chemicals and the crushed ore, collecting the dissolved gold by adsorption. The "loaded" carbon is then sent to the refinery.

Metallurgical work indicates that collectively these two recovery processes will recover 95% of the gold.

At Aquarius in Canada, an environmentally friendly "freeze wall" will keep water from the pit and preserve nearby lakes.



The new information gathered on Aquarius was cross-referenced with known production data from earlier underground operations.

Dave Seamark digitized much of this data.

# **Aquarius**

Location:
Ontario, Canada

Type of mine: Open pit; mill

Ownership: 100%

Status: Under construction

Capital cost: \$100 million

Full production: Early 1999

Average annual production: 166,000 ounces of gold

Target costs per ounce:

Cash operating cost: \$218
Total production cost: \$316

1996 reserves:

1,277,000 ounces of gold

After the gold has been extracted, the finely ground rock that remains will be treated to neutralize the residual chemicals, then deposited in a tailings pond. This process insures that the tailings will be benign.

Cash operating costs will vary throughout the life of the project. The average is expected to be \$218 per ounce of gold produced over the life of the mine. This would make Aquarius one of our lowest-cost mines.

Aquarius should be in full production by early 1999, thanks to the hard work of a team of dedicated people like geotech Brad Norman.



Project geologist Albert Ali helped to identify a number of additional exploration targets on this 6,987-acre property in the prolific Timmins gold district.



# **Gold Exploration Potential**

The exploration potential is high for this 6,987-acre property. Targets have been identified to both the east and the west of the existing ore body. We will begin drilling these targets in 1997. We believe there is good opportunity to extend the project's life beyond the current seven years.

#### **Gold in 1999**

In early 1997, we plan to start construction of the freeze wall. It will involve the drilling of over 1900 holes for the piping. The actual freezing is not scheduled to begin until later in 1997.

Engineering and construction of the mill will start in early 1997. Assuming timely receipt of permits, startup is expected in late 1998.

Our goal is to have Aquarius in full production in early 1999.

# Paredones Amarillos



In Mexico, field geologists Miguel Baños and David White helped to assemble the geological data that was essential to understand the ore body before beginning to mine it. Paredones Amarillos is scheduled for startup in late 1998.

Paredones Amarillos, located near La Paz on the Baja California Sur peninsula of Mexico, will be one of the first in the next generation of Echo Bay mines.

#### Construction Decision

In January 1997, Echo Bay announced its plans to go ahead with construction of the Paredones Amarillos project, subject to project financing and also contingent on Viceroy Resource Corporation, Echo Bay's 40% joint venture partner, approving the project and obtaining its share of financing.

Paredones Amarillos will be one of the largest gold mines in Mexico.

The project has an estimated capital cost of \$111 million (Echo Bay's share, \$67 million). Assuming timely issuance of permits, startup is scheduled for late 1998, with full-scale commercial gold production in early 1999.

#### Joint Venture Partner

In 1995, Echo Bay completed the exploration work necessary to earn its 60% interest in the project. Baja Gold (now merged with Viceroy) was Echo Bay's original strategic alliance partner and acquired the property in 1992. We began earning our interest in the property in 1993.

# Reserves

Since 1993, over 205,000 feet (62,500 meters) of drilling has been done. Based on the results of this drilling and other work, a detailed feasibility study was completed in December 1996.

> Echo Bay's José Sánchez prepares drill samples for assay lab analysis. All of our work indicates a 91% gold recovery is achievable.





Rogelio Rosa (left) and Isaac Ortega helped to develop Paredones Amarillos by logging drill core samples.
Once in full operation in early 1999, the mine will be the largest employer in the area.

The resulting mine plan indicates a proven and probable reserve of 1.3 million ounces of gold (Echo Bay's 60% share, 775,200 ounces).

# **Operations**

The project will be an open pit mine. The mining plan indicates average annual gold production of 128,000 ounces of gold (Echo Bay's share, 77,000 ounces).

The mill will have a rated capacity of 11,000 tonnes per day. The

small amount of coarse gold within the deposit will be recovered through a gravity circuit. The majority of the gold will be recovered through a carbon-in-pulp mill circuit.

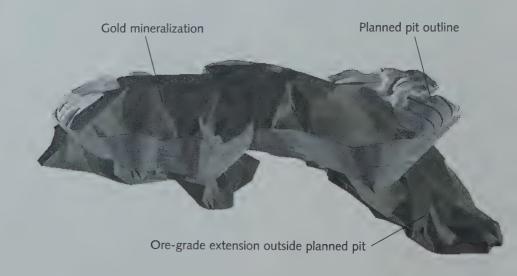
This process flow is expected to recover approximately 91% of the contained gold.

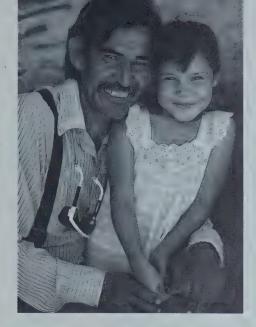
Paredones Amarillos will use a cost-effective method for recycling the mill effluent back into the recovery circuit. Most of the key chemical not consumed by recovery can be reused.

# Working in Mexico

At full production, Paredones Amarillos will employ as many as 300 people — one of the largest employers in the area. This means an economic boost for the region. The project also enjoys strong support because of our training plans — over 98% of the workforce will be from the immediate area.

An ore-grade extension has been identified below and to the east of the planned pit outline. We will investigate the area's potential for underground development once we can access it from the bottom of the pit.





The future is brighter for five-year-old Rita Judith Cordero and her father Mario Cordero. The project will have a significant positive economic impact on the entire region.

We take our high environmental standards with us wherever we go. Feliciano Aguilar (left) and Israel Rivera are transplanting a cactus that would have been affected by our early exploration drilling.

Paredones Amarillos will be one of the largest gold mines in Mexico. Startup is scheduled for late 1998.

**Further Exploration Potential** 

In addition to the 1.3 million ounces of gold in reserves, ore-grade mineralization continues below and to the east of the planned pit. As we mine, we will evaluate the potential to mine this area from an underground ramp at the bottom of the pit.

Based on current reserves, the project will have an operating life of nine years. This assumes no more gold is ever discovered on the property (which is unlikely, as local miners using hand tools have been digging near-surface gold for decades).

In addition to the underground potential, other surface targets have been identified for drilling on the 31,500-acre land position.

# **Paredones Amarillos**

Location:

Baja California Sur, Mexico

Type of mine: Open pit; mill

Ownership: 60%

Strategic alliance partner:

Viceroy Resource

Status: Planned for construction

Capital cost:

\$111 million (Echo Bay's 60% share, \$67 million)

Full production: Early 1999

Average annual production:

128,000 ounces of gold (Echo Bay's 60% share, 77,000 ounces)

Target costs per ounce:

Cash operating cost: \$223
Total production cost: \$338

1996 reserves:

1,292,000 ounces of gold (Echo Bay's 60% share, 775,200 ounces)



# Kingking

The Kingking porphyry coppergold deposit is located about eight miles from the town of Pantukan on the coast of Mindanao Island in the Philippines.

Echo Bay and its joint venture partner, TVI Pacific, have an option for the joint venture to acquire up to 100% of Kingking, through various foreign subsidiaries and alliances with Filipino affiliates, from the property's current owner, Benguet Corporation.

Echo Bay and its Filipino affiliates hold 75% of the joint venture.

Benguet has outlined 3.8 million ounces of gold and 2.1 billion pounds of copper mineralization at Kingking (100% basis). In 1996, the Echo Bay-TVI joint venture further explored the deposit with 149,000 feet (45,400 meters) of additional exploration and confirmation drilling.

As the year progressed, drilling was directed at further investigating the areas where earlier work indicated there is material richer in gold and leaner in copper.

Drilling accelerated on two of these targets, Casagumayan and Tiogdan, in late 1996 and early 1997.

# **Initial Feasibility**

Once all of the detailed data generated by the drilling is analyzed, as well as the results of mapping, sampling and metallurgical testwork, an initial feasibility study will be completed. The current target date for completion of this work is the first quarter of 1997.



In this feasibility study, preliminary economics will be applied to the geological information. This will help us to determine what part of the ore body could be economically recoverable. It will also identify alternative processing methods and preliminary production rates, operating costs and capital costs for the project. In other words, it will tell us how to proceed to the next step.

# The Next Step

Based on the outcome of the initial study, the joint venture partners could expect to complete a detailed Surface outcroppings
like this one being
sampled by Roland
Mancao are what
attract local miners
with hand tools to the
area. In the background
lies the deepwater
Gulf of Davao.

Kingking is one of the largest porphyry copper-gold deposits in the Philippines.

feasibility study in late 1997 or early 1998. The interest in the property could then be acquired by the Echo Bay-TVI joint venture for \$67 million.

The joint venture would also pay up to \$18 million for any increase in proven and probable gold reserves over the resource outlined initially by Benguet.

Benguet has the right to reacquire a 20% interest in the project by paying the joint venture \$20 million. If that were to happen, the 75% share of Echo Bay and its Filipino affiliates would be reduced to 65%.

# Outlook

We are continuing to drill the Casagumayan and Tiogdan areas, looking for higher gold grades to improve the economics of the project.

Exploration also expanded to two other targets identified on the property, Binutaan and Diat. They are currently being mapped and sampled and should have some limited drilling on them by mid-1997.



We are continuing
to drill to the west
in areas where there
are indications of
higher gold grades.
Jeffrey Villanueva (left)
and Samuel Odiong
helped to keep a total
of 10 drill rigs
working in 1996.



An extensive two-year program of advanced exploration and confirmation drilling is under way.
Ramce Rey Ponce is helping to track the drill samples from several mineralized zones in the area.

# Kingking

#### Location:

Mindanao Island, Philippines

Deposit: Porphyry copper-gold

# Ownership:

Option for up to 75%

Strategic alliance partner: TVI Pacific

# Status:

Early-stage development property, feasibility work under way

#### 1996 other mineralization:

3.8 million ounces of gold and 2.1 billion pounds of copper (100% basis)

# Santa Elina

Santa Elina Gold Corporation is our strategic alliance partner in Brazil. A well-connected Brazilian gold company, Santa Elina provides Echo Bay with access to several promising exploration and development opportunities as well as one of the largest prospective land positions in Brazil.

In 1996, we increased our ownership of Santa Elina to 51% from 7%. Robert C. Armstrong, who was Executive Vice President of Echo Bay, was named President and Chief Executive Officer of Santa Elina, underscoring the importance of Santa Elina in Echo Bay's growth strategy.

# **Land Position**

Central to the assets of Santa Elina is a land position of over 96,000 square miles (25 million hectares) under application. Much of this land is located on known, but not extensively explored, gold belts throughout Brazil.

One of the primary focuses of Santa Elina's new management team is prioritizing the land position and realizing the value of this asset as quickly as possible. Exploration joint ventures are being considered with qualified third parties where appropriate.

# Chapada

This property is a large, low-grade copper-gold deposit located in Goias State, Brazil. It is 83%-owned by Santa Elina. Echo Bay currently owns, indirectly, 42% of Chapada. Separately, we also have an option entitling us to increase our interest in Chapada to 67%.



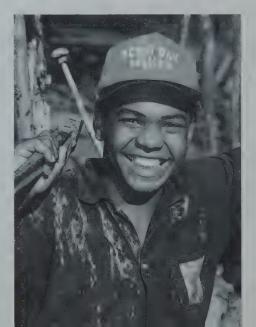
Chapada was originally investigated as a copper deposit. The focus now is on copper-gold. In 1996, Santa Elina completed over 120,000 feet (37,500 meters) of advanced exploration drilling. The goal was to confirm and expand the resource of 1.3 million ounces of gold and 972 million pounds of copper mineralization (100% basis) identified at the site.

During the year, more tons of ore were outlined at about the same or slightly lower grades. This material will be added to the geologic resource evaluation and incorporated into a detailed feasibility study, currently expected to be completed in the second quarter of 1997.

Among the issues being addressed in the feasibility study is the cost of transporting the copper-gold concentrates 1,000 miles to a deepwater port. Due to the location of the deposit and the distance to the nearest smelter, resolving this issue will be one of the keys to the project's success.

Samples from the numerous drill rigs at work at Chapada are carefully bagged for assay. The reported resource at the site is 1.3 million ounces of gold and 972 million pounds of copper mineralization.

With the help of skilled drillers like Saulo Silva de Miranda, 16 drill rigs were kept busy at different Santa Elina properties in 1996.



# Low-Cost Power

Consideration is also being given to a hydropower plant proposed for the Guaporé River as a potential source of low-cost power for several of Santa Elina's gold projects in Brazil. Santa Elina owns 83% of the planned project, which could generate significant cash flow to Santa Elina for 30 years or more.

# São Vicente

São Vicente is a low-grade open pit gold mine in western Brazil. It is 83%-owned by Santa Elina.

In early 1997, operations were suspended temporarily pending completion of a detailed feasibility study investigating the conversion of São Vicente from a milling operation to a low-cost heap leach operation. This would allow existing ore to be treated in a more cost-effective method while additional exploration is undertaken to better realize the value of the deposit, including the potential at depth.

#### São Francisco

Santa Elina also owns 83% of São Francisco, a gold deposit located near the border between Brazil and Bolivia. The gold mineralization is low-grade but near-surface and oxidized — ideal for a low-strip-ratio, open pit heap leaching operation.

During late 1996, four drills worked to better define the resource. Initial metallurgical testing indicates good gold recoveries from heap leaching. The information being gathered is being incorporated into an initial feasibility study in 1997.



# Fazenda Nova

Six gold targets were identified at Fazenda Nova, another large property 83%-owned by Santa Elina.

During 1996, five drills were active at the site. At Lavrinha, the first target drilled, work identified a near-surface, oxidized, low-grade gold deposit. In 1997, Santa Elina will prepare a detailed feasibility study on Lavrinha. If the economics are favorable, this resource could be developed as a small open pit mine using heap leach processing.

Exploration will continue on targets identified on the large associated land package for additional deposits that could be processed in the same low-cost manner.

Geological technician Iúnior Ramos de Menezes inspects drill core from Chapada, with help from enthusiastic Sheike. Additional work is being done to address the issue of transportation costs and to evaluate development alternatives for the site.

# Santa Elina

# Chapada

Location: Brazil

Deposit: Copper and gold 1996 other mineralization:

1,320,000 ounces of gold, 972 million pounds of copper (100% basis)

Status: Detailed feasibility study, 1997

# São Francisco

Location: Brazil Deposit: Gold

Status: Initial feasibility study, 1997

# Fazenda Nova

Location: Brazil Deposit: Gold

Status: Detailed feasibility study, 1997

# São Vicente

Location: Brazil Deposit: Gold

Status: Detailed feasibility study, 1997

# Promising Prospects

We continue to add new prospects to our "pipeline" of projects in various stages of exploration and development. New projects are needed to replace those, like Aquarius and Paredones Amarillos, where construction decisions were made and others whose promise does not materialize.

Our area of prime interest has now changed from worldwide to a focus on the gold belts of the Americas, particularly Mexico and south. We will stay reactive to opportunities elsewhere throughout the world but not proactive.





At Kilgore in Idaho, Billy Parsons operates one of the drill rigs helicoptered to the site to minimize environmental impacts.

# **Strategic Alliances**

How do we keep filling and replacing our "pipeline" of projects? One way is through strategic alliances and joint ventures we established with a number of small, fast-moving entrepreneurial and exploration-oriented companies. These relationships give us early access to attractive gold properties.

Our partners already hold significant land positions. We earn our way in by funding the exploration and evaluation on their strategic properties.

They provide the prospects; we provide the exploration funding and, when appropriate, the development and operating expertise. It benefits us both.

One of our most promising exploration prospects is Dolores in Mexico.

Drilling results are being reviewed by members of both Echo Bay's and Minefinder's technical team (clockwise from left):

Dieter Krewedl,

Bill Reed, Victor Juvera,

Bob Whittemore and Jeff Wilson.

#### Focus and Refocus

Reality tells us that a number of our current prospects won't prove up. That's why we need to constantly add to the pipeline.

We strive continually to upgrade the quality of projects in our exploration pipeline. We narrow our focus to the most promising prospects as we advance the total mix of projects. If we do our job right, each year we should have fewer — but better — projects to advance.

# Dolores, Mexico

Drilling began on the Dolores project in Mexico in August 1996. Results so far are positive — of the first 30 holes, 24 encountered ore-grade mineralization over substantial widths.

We have no doubt that there is gold at Dolores. The only questions are, how much and can it be economically recovered?

Echo Bay established a strategic alliance and joint venture with Minefinders Corporation, the exploration company that holds the property. We can earn a 60% interest.

We believe Dolores hosts a large epithermal gold deposit. Trenching and sampling to date identified at least three zones along a two-mile mineralized section — only a small portion of which has been drilled. The current phase of drilling includes at least 50 more holes as well as additional detailed mapping, sampling and metallurgical test work.

# Kilgore, Idaho

In late 1996, Echo Bay acquired the remaining 49% of Kilgore.

With a geologic resource already defined at one target and at least seven other targets still to investigate, the property has excellent potential.

The resource defined is associated with only one target in a large mineralized system. Additional mineralization is necessary from one or more of the other targets to be sufficient to support a central processing facility.

To limit the impact on the environment of our exploration work at Kilgore, we use helicopters to air-lift the rigs in and out of the drill sites. For these and other efforts, we received the 1996 Idaho Department of Lands' "Excellence in Exploration Reclamation Award."

Rock samples collected at an exploration site can provide important geological information. An interpretation of the samples collected by César Gutierrez at the Huaco Cucho project in Peru will help direct next year's drill program.





At Youga in Burkina
Faso, West Africa,
geologist Jeffrey Best
examines a telltale
excavation left behind
by local miners
using hand tools.

# Youga, Burkina Faso Bitou, Burkina Faso Nangodi, Ghana

In West Africa, we have a 50% interest in the Youga and Bitou exploration concessions in Burkina Faso as well as the adjacent Nangodi concessions, located directly across the border in Ghana. Our joint venture partner is Ashanti Goldfields Company, who is the operator.

The properties cover a large mineralized system where local miners were digging high-grade gold with

hand tools for years. Our targets are the "halos" of low-grade but large-volume mineralization surrounding these telltale excavations.

Mapping, sampling and drilling are continuing at a number of locations on the 1,309 square miles that constitute these properties. Ore-grade gold was present in 16 of the first 19 core drill holes completed on one target at Youga. The 1997 drill program includes more holes on this target as well as additional targets recently identified.



There is more gold yet to be found in Nevada.
Site geologist Trevor
Thomas examines
drill chip samples from the Ratto Canyon
prospect near Eureka,
Nevada.



San Antonio, located adjacent to the Paredones Amarillos mine-to-be, represents another opportunity for Echo Bay in Mexico.
José Abelardo
Manríquez assists at the site by logging the drill core.

# Huaco Cucho, Peru Patacancha, Peru

Positive preliminary results at Huaco Cucho, a joint venture property in Peru, resulted in Echo Bay establishing a similar joint venture with the owner of the adjacent Patacancha claims.

Our target here is several highgrade gold structures with lower-grade disseminated gold surrounding them.

In 1996, we completed extensive mapping, sampling and approximately 6,500 feet (2,000 meters) of drilling. Six significant structures were identified between the two properties.

Echo Bay can earn a 50% interest in each property.

# **Around Development Projects**

Our exploration geologists are actively investigating additional opportunities at the mines we already operate or plan to build.

Exploration prospects are always given a high priority when located near one of our existing or future operations. K-2 was the sixth deposit discovered at Kettle River. We are already exploring Lamefoot North and an extension of K-2, and our search for the seventh separate deposit on the property is well under way. At Aquarius in Canada, two additional targets were identified and are being aggressively investigated. At Paredones Amarillos in Mexico. geological mapping continues and a geochemical stream sediment survey will be conducted in 1997.

# **Other Efforts**

During the year, Echo Bay also entered into strategic alliances and joint ventures on a number of other early-stage exploration properties. We have strengthened our presence especially in Mexico, Brazil, Canada and the United States (particularly in Nevada).

At year's end, our exploration portfolio had over 30 properties, 17 of which were strategic alliances or joint ventures. Two projects had moved through the pipeline from acquisition to exploration to development and into the construction phase.

As time goes on, we will continue to refine the pipeline, advancing those projects with the most promise.

# How We Mine

We have earmarked the cash flow from our four existing gold mines for reinvestment in expanded gold reserves and production.

We intend to maximize what we already have—to grow our existing gold mines.

We also plan to build new gold mines—one in Canada and one in Mexico, this year and next.

But mining gold is only part of what we do. We protect and preserve the environment first and foremost. We make a contribution to our neighbors and our communities.

We apply the highest standards wherever we are, around the world. We take responsibility for our actions as citizens of Planet Earth.

# McCoy/Cove

McCoy/Cove, the company's largest producer, is located 30 miles southwest of the town of Battle Mountain in Nevada. A large-scale open pit mining operation, it has both heap leach and mill recovery processes. In 1996, the project produced 271,731 ounces of gold and 7.1 million ounces of silver.

# McCoy, then Cove

Originally acquired by Echo Bay in late 1986, McCoy was the only deposit known to exist on the property at that time. Three months later, we discovered the Cove deposit a mile away. This deposit contained large quantities of both gold and silver. A gold producer first, McCoy/Cove also has the distinction of being one of the biggest silver-producing mines in the world. Over its life, it has produced more than 60 million ounces of silver.

In 1996, mining resumed in the McCoy pit at the western edge of the deposit. McCoy ore was blended with Cove ore to optimize the tons treated in the mill and on the heap leach pads.

# Operations

Large-volume mining methods are employed at McCoy/Cove to achieve economies of scale. This helps to keep unit costs per ton down, even in times when ore grades are diminishing.

As we mine deeper in the pit, ore grades decline. In 1996, we compensated for this by treating about 24% more tons of ore in the mill and 39% more tons of ore on the leach pad.



Daily mining rates exceeded 173,000 tons of ore and waste in 1996. We mined more ore every day than we processed, with the excess going to stockpiles for treatment later. We mine at this high rate to minimize the time and expense of dewatering the Cove pit — we will mine it out faster and pump less water.

The mined material is moved by a fleet of jumbo trucks, some capable of hauling 250 tons in a single load.

Lower-grade oxide ores are taken to the dedicated heap leach pads. Heap leaching economically recovers low-grade gold and silver that would not be profitable to process through the mill. Approximately 25% of the site's gold production is from heap leaching.

Our largest producer,
McCoy/Cove, uses very
large equipment to
achieve economies
of scale. A shovel loads
up to 250 tons into
our largest-capacity
truck — the "King of
the Lode." The truck is
about the height of a
three-story building.

Higher-grade oxide and all non-oxide ores are treated in the recently expanded mill. The expansion was completed three months ahead of schedule, in April 1996, and under budget. The increased capacity means that 10,000 tons per day of ore can be treated compared with the previous 7,500 tons per day.

The expanded mill also increases the retention time for the treatment of sulfide ores. This means improved recoveries. While mill processing is more costly, it results in more of the contained ounces being recovered, so the costs are spread over more ounces — and unit costs are lower per ounce of gold produced.

Monitoring helps us
to maximize the
effectiveness of our
environmental
protection and
enhancement programs.
Environmental
engineer Laura Knight
gathers water samples
from the infiltration
pond daily.



# Safety First

In 1996, the 514 men and women of McCoy/Cove completed 2.3 million hours of work without a single lost-time accident.

Good miners run safe mines.

# Cove Pit Wall

In August 1996, monitoring systems at the Cove pit identified ground movement in a portion of the western pit wall. An investigation of the area led to the conclusion that a section of waste rock, estimated to be approximately 30 million tons, had become unstable. We believe the geological structure started to shift because of its association with a prehistoric lake or stream bed.

Early identification of the problem allowed mining efforts to be redirected away from the area of concern. The mine plan was adjusted, and mining continued uninterrupted.

The significance of the unstable block is that it is above an area that contains gold. In order to insure worker safety while mining this area, the pit wall will have to be stabilized.

We have established a provision of \$30 million for the estimated cost of this stabilization. Before the actual work can begin, a geological

# McCoy/Cove

# Location:

Nevada, United States

# Type of mine:

Open pit; mill and heap leach

Ownership: 100%

#### 1996 production:

271,731 ounces of gold 7,102,348 ounces of silver

# 1996 cash operating costs:

\$271 per ounce of gold \$3.60 per ounce of silver

# 1996 reserves:

1,183,000 ounces of gold 53,858,000 ounces of silver

Year acquired: 1986

**Total production since acquisition:** 2,600,944 ounces of gold 60,452,370 ounces of silver

Employees: 514

McCoy/Cove is also one of the biggest silver mines in the world.

study must be completed to fully understand the structures involved. The stabilization work will begin in mid-1997 and continue into 1998. In the interim, mining will continue in other parts of the pit.

# **Ongoing Reclamation**

McCoy/Cove started its reclamation activities a number of years ago. Whether it is a road to an exploration site or a rock pile, as soon as work is finished — reclamation begins. Slopes are recontoured, topsoil is redistributed and seeded, and native shrubs are planted.

These types of reclamation efforts are ongoing at all of our mines.

# Outlook

McCoy/Cove has been the company's largest producer for a number of years. While mining at the Cove deposit is expected to be completed in 1999 and processing of the stockpiles in 2001, exploration continues on our claim block and beyond. Alternatives are also being evaluated for further utilizing the equipment, facilities and know-how that exist at this site.

We currently expect to produce about 15-20% less gold in 1997 than in 1996, reflecting lower-grade ores. Silver production is expected to be about the same in 1997 as it was in 1996.

# Betty helps to keep the McCoy/Cove mill operating 24 hours a day, seven days a week. Remote-control hoists suspended from the ceiling are used to move heavy equipment within the mill.

Mill maintenance

technician Raymond



Almost 30% more ore flows through the mill daily since an expansion was completed in early 1996. Control room operator Janet Glenn makes sure everything goes smoothly.



# Round Mountain



A new mill facility under construction at Round Mountain will allow us to recover more of the contained gold from nonoxide ores. John Wild, project manager and mill superintendent, directs all of the related construction activities.

Round Mountain is a large-scale, open pit heap leach gold mine located north of Tonopah, Nevada. Gold production increased during the year by approximately 19% as more tons of ore were processed on the leach pads.

Operated intermittently since 1906, the project was reopened in 1977. Echo Bay acquired a 50% interest and became the operator in 1985. Our partners are Homestake Mining Company and Case, Pomeroy & Company, Inc. Each owns 25%.

Economies of scale help to drive down unit costs per ton. Round Mountain is one of the largest open pit heap leach gold mines in the world.

# **Operations**

In 1996, 37 trucks carrying up to 190 tons apiece hauled an average of 240,000 tons of material every day to different destinations within the site. The mine operates 24 hours a day, seven days a week.

Higher-grade ores are crushed and transported to a reusable leach pad. Here a computer-operated conveyor belt stacks the ore in a level pile 35 feet high. During the year, Round Mountain increased the amount of ore leached on this pad by shortening the leach cycle from 120 days to 90 days.

Then the ore is removed to a "dedicated" (permanent) leach pad to extract still more gold over a period of years.

The dedicated pad is where all of the lower-grade oxide ores are taken directly from the open pit. This ore is not crushed, as the crushing cost would make this low-grade material uneconomic.

# Heap Leaching

Heap leaching is a low-cost method of recovering gold from ore that is too low-grade to be processed through a mill.

In 1996, Round Mountain processed 32% more ore on the dedicated pad and 23% more on the reusable pad than in 1995. This increased handling of ore resulted in lower costs per ton but was offset by the lower grades treated.

Overall cash operating costs increased slightly. In addition, more than 2.5 million tons of non-oxidized ore were stockpiled for treatment at a new mill, now under construction for startup in late 1997.

# Mill Being Built

As we mine deeper in the pit at Round Mountain, more nonoxide ores are encountered, warranting construction of a mill facility.

Construction started in April 1996.

Total cost is currently expected to be \$68 million (our 50% share, \$34 million).

The higher recoveries made possible by milling nonoxide ores (usually 80-90%) over those



Before ore is placed on the reusable leach pad, it is crushed to expose more of the gold. This improves the effectiveness of the recovery process. Kristy Wilkey operates the primary crusher.



achieved by heap leaching (usually below 50%) will result in the recovery of more of the contained ounces.

Large quantities of nonoxide ore are being stockpiled in anticipation of mill completion in late 1997. Initial capacity will be 8,000 tons per day. Annual production from the mill will be as much as 100,000 ounces (Echo Bay's share, 50,000 ounces) in peak years, offsetting lower production from reduced quantities of oxide ore (which are heap leached).

Ore is placed on the permanent leach pads in 35-foot-high lifts. It is then "raked" to improve the percolation of the leaching solution. Heap leaching is a costeffective way to treat lower-grade oxide ores.

At Round Mountain, a new mill is to be completed by year-end 1997.

# Community

The mine's relatively remote location has resulted in special considerations for Hadley, the community developed by Round Mountain for its employees. Round Mountain built necessities like the school, grocery store and fire department, as well as a golf course for recreational purposes. We also have on-site day care for our employees' families.

These efforts are an example of Echo Bay's commitment to making a positive contribution to the communities in which we work.



Explosives blaster
Yvonne Morones
picks up her daughter
Anissa from our
day care facility.
We're open 24 hours
a day, seven days
a week.

We feel as strongly about this as we do about our commitment to be leaders in environmentally responsible mining throughout the world.

#### Reserves

When Round Mountain was acquired in 1985, the project had a total of 1.8 million ounces of reserves (our 50% share, 900,000 ounces). Since then, we have produced almost 3.8 million ounces — and we still have sufficient reserves to continue at current production levels for 15 more years.

In 1995, a two-year drilling program added more than two million ounces to Round Mountain's reserves (Echo Bay's 50% share, one million ounces). Additional targets were identified in 1996, and in 1997 we are evaluating targets at depth and also initiating a new grassroots exploration effort on the claim block.

#### Outlook

Round Mountain's production in 1997 is currently expected to be about 5% lower than in 1996. The mining rate will remain the same, but the mix of ores and the average ore grade will change. More nonoxide mill tons will be mined, with fewer oxide tons available to be placed on the dedicated pad. In addition, the areas of the ore body that are scheduled to be mined in 1997 contain somewhat lower-grade oxide ores.

# **Round Mountain**

#### Location:

Nevada, United States

# Type of mine:

Open pit; heap leach Mill facility under construction

Ownership: 50%

# 1996 total production:

410,974 ounces of gold (Echo Bay's 50% share, 205,487 ounces)

1996 cash operating costs:

\$221 per ounce

# 1996 total reserves:

9,050,000 ounces (Echo Bay's 50% share, 4,525,000 ounces)

Year acquired: 1985

Total produced since acquisition:

3,795,714 ounces (Echo Bay's 50% share, 1,897,857 ounces)

Employees: 599

# Lupin

The northernmost gold mine in the world outside of Russia, Lupin is 56 miles south of the Arctic Circle in Canada's Northwest Territories. The mine is an excellent example of man's ingenuity in dealing with adverse conditions.

A highly mechanized underground mine, Lupin operates 364 days a year despite harsh weather conditions. Most of its supplies are trucked to the remote site over a 360-mile winter road built across the frozen lakes between Yellowknife and Lupin. The road is open for only 10 weeks a year.



Inuit employees like
Charlie Hinanik are an
important part of the
workforce at Lupin.
He lives 124 miles
(by air) from the mine
site. We fly all of our
people in and out of the
remote site year-round.



During that time, standard tractortrailers haul in a year's supply of diesel fuel, cement for backfilling, chemical reagents, steel grinding media, explosives and other supplies — over 74,000 tons in 1996.

Ulu

In 1995, Echo Bay acquired the Ulu deposit as a satellite mine to extend Lupin's life. We intend to build a winter road to haul ore mined at Ulu to the Lupin mill for processing.

The distance is 100 miles, less than one-third the 360-mile length of the winter road we currently construct each year between Lupin and Yellowknife.

Mining is expected to be ongoing at Ulu throughout the year, but ore will only be transported to the Lupin mill between January and April. The stockpiled ore would then be used as supplemental mill feed throughout the year.

We plan to transport ore mined at Ulu, 100 miles north, to the Lupin mill over a winter road built across the frozen lakes between the two sites.

In 1996, we began driving an underground ramp toward the Ulu mineralization. Underground drilling and bulk sampling will be done to confirm the 610,000 ounces of gold identified by the property's previous owner.

# **Current Operations**

The ore mined at Lupin is crushed underground on three levels and is then hoisted to the surface, where it is fed to the mill. After the gold is removed, the rest of the crushed rock is mixed with cement and used to backfill the mined-out areas. This provides the foundation for mining on the next level.

During the second half of the year, mining was slowed by the necessity of more ground support as we mined deeper at Lupin. The slower mining resulted in fewer tons being delivered to the mill for processing, fewer ounces of gold produced, and higher costs.

# Exploring for Gold (and Diamonds)

We continue to look for other gold deposits like Ulu within trucking distance of the Lupin mill. We hold all of the mineral rights on 16,699 acres in the region, and we continue to explore for gold and, through joint ventures, for diamonds.

As we mine deeper at Lupin, more rock support is necessary for structural stability. Underground miner Mike Woloshyn uses a rock bolter to secure a portion of this stope.

The Ulu deposit is expected to provide supplemental feed for the Lupin mill.

During the year, Echo Bay signed an agreement for the use of Lupin's facilities with another company doing diamond exploration 13 miles away. Echo Bay receives a payment for the use of its sites, and the joint venture has a place to evaluate its exploration results.

#### Outlook

Production in 1997 is expected to be about the same as in 1996.

Supplemental ore from Ulu is expected to partially offset a reduction in the tons mined at Lupin in future years.

# Lupin

Location:

Northwest Territories, Canada

Type of mine: Underground; mill

Ownership: 100%

**1996 production:** 166.791 ounces

**1996 cash operating costs:** \$299 per ounce

1996 reserves:

443,000 ounces of gold 1,044,000 ounces of other mineralization including the Ulu deposit

Year of startup: 1982

Total production since acquisition: 2,642,030 ounces

Employees: 556



# Kettle River

The Kettle River mine, nestled in the mountains of northeastern Washington State, gave a solid performance in 1996 and was our lowest-cost producer. A full year of mining from the higher-grade Lamefoot deposit resulted in a 24% increase in production and a 13% decrease in cash operating costs over 1995.

# Charathurs

Kettle River is made up of a series of deposits feeding a central mill. The fifth deposit to be mined, Lamefoot, provided the majority of the ore processed in 1996.

Four deposits have already been mined out as planned, and our land reclamation programs are well under way at all four.

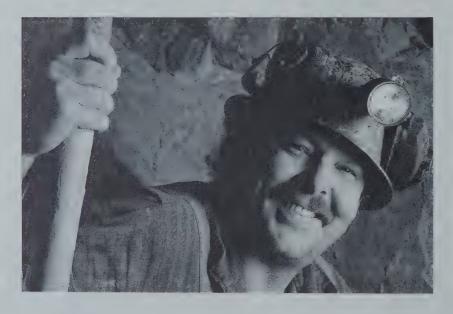
The ore from Lamefoot is trucked over country roads to the mill facility nine miles away.

In late 1996, the mill increased operations from five to seven days a week, maximizing mill capacity at 2,000 tons per day. The increased production capacity will partly offset the lower ore grades planned for processing in 1997.



After defining the K-2 deposit in 1996, we are actively looking for what could become our next gold deposit at Kettle River.

Scott Wendling uses the Global Positioning System, which is satellite-directed, to locate an exploration drill hole precisely.



Underground miner
Francis Bacon is
helping to develop
the K-2 deposit —
Kettle River's sixth
deposit. At year's end,
K-2 added 139,000
ounces of gold to proven
and probable reserves.

Kettle River increased production by 24% and reduced unit costs in 1996.

# K-2, the Sixth Deposit

During the year, underground exploration was undertaken on the K-2 deposit to confirm the results of surface drilling. K-2 added 139,000 ounces to Kettle River's reserves at year-end 1996 and potential for further expansion.

Late in the year, large bulk samples of ore from K-2 were treated at the mill. Because of the ore's high clay content, the best mill processing was accomplished by blending this ore with Lamefoot's. The current mine plan calls for approximately 75% of the mill feed in 1997 to come from Lamefoot with the rest from the K-2 deposit.

# **Exploration Potential**

In 1997, we plan an underground exploration drill program that will investigate a northern extension of the same structures we are currently mining at Lamefoot.

We will also investigate other targets identified in the surrounding area. This region has been producing gold for more than a century, and we think the potential remains good for the discovery of more deposits.

# **Ongoing Reclamation**

Kettle River, with its series of deposits mined in sequence, creates the ideal situation for ongoing reclamation activities. Even before we finish mining one deposit and move to the next, we start our reclamation efforts.

As part of its annual Arbor Day activities, Kettle River sponsored a program that involved over

150 school children, over 50 employees and family members, members of the local business community, and representatives of state and federal agencies. The program was designed to demonstrate how development of our natural resources can be done responsibly.

# Outlook

Production in 1997 is currently anticipated to be about 5-10% higher than in 1996. Blending of the ores from Lamefoot and K-2 will result in slightly lower millhead grades, but this will be more than offset by the increased mill throughput rates.

Located in the scenic foothills of northeastern Washington State, Kettle River is a leader in concurrent reclamation — reclaiming one site while mining another.

These and other efforts are undertaken to minimize the visual impacts of our activities in the area.



# **Kettle River**

# Location:

Washington State, United States

# Type of mine:

Underground and also (earlier) open pit; mill

Ownership: 100%

**1996 production:** 124,910 ounces

**1996 cash operating costs:** \$201 per ounce

**1996 reserves:** 370,000 ounces of gold

Year of startup: 1990

**Total production since acquisition:** 628,974 ounces (Echo Bay's share, 549,944 ounces)

Employees: 219

# Jewelry Underpins the Gold Price

by Timothy Green

Timothy Green is an authority on worldwide gold markets. His books include The Prospect for Gold, The Gold Companion and, most recently, a revised edition of his classic bestseller, The World of Gold.

On a trip to Italy in the fall of 1996, I inquired of a jewelry manufacturer, "How's business?"

"We're absolutely still Number One, even though other countries have come up," he said proudly. "We have resilience and bounce."

That robust answer takes us to the core of today's gold consumption: jewelry manufacture, particularly in Italy.

The gold price drifted downward but didn't change very much in 1996, as is evident from the chart on the next page. This was particularly disappointing in view of the expectations raised early in the year, when the price of gold rose above \$410 per ounce — briefly.

But the onward march of karat gold jewelry has continued to be the main buttress of the gold price. Italy alone fabricated close to 13 million ounces of newly mined gold in 1996, while worldwide manufacture (excluding recycled scrap) was around 70 million ounces.

Specialist uses of 15 million ounces in electronics, dentistry and coins brought the fabrication total to 85 million ounces — more than the total new mine production of 75 million ounces.

Thus, what I always call the "bread-and-butter" demand for gold continues to outstrip mine supply, as it has done throughout the 1990s.

The balance of supply, of course, comes from scrap, from central bank sales and, in some years, from the shifting sands of forward sales by gold miners or large investment funds.

But year-in, year-out, jewelry underpins the price. The price may not be performing as well as many had hoped (in 1996 it averaged \$388), but the overall health of physical gold demand is good.

# Italy Is the World Leader

To return to Italy for a moment: it provides us with an object lesson of gold's daily success in the late 1990s, as Italy is the world leader not only in jewelry making, but also in design and technological excellence.

Italy produces 16% of all karat gold jewelry manufactured world-wide, and Italy exports three-quarters of what it produces. Walk into any jewelry store, not just in Europe or North America, but in South America or Saudi Arabia or Hong Kong or Japan, and you will find Italian-made articles.

"Our great advantage," explained a manufacturer in Arezzo, the hill town in Tuscany that is home to many manufacturers, "is our talent for clinching deals."

# **Cultivating New Markets**

Italians have the knack of cultivating new markets. A decade ago, you would find no Italian jewelry in Spain or Portugal; today 40% of all gold jewelry in Spanish shops and 25% in Portugal is Italian.

In the United States, Italian jewelry accounts for almost one-third of all sales.

An additional secret of Italian jewelry manufacturers' success is that, although they have large factories (especially to make karat gold chain), more than 90% of manufacture is by small family-run businesses, some even working from home. I recall calling once on a fabricator who had machines in his kitchen, from which golden chains flowed like exotic pasta. Such pragmatism helps the Italians to maintain their competitive edge.

# The Gold Price in 1996

Average monthly price



# **Diversity of Exports**

The diversity of Italian exports also enables the industry to weather local recessions. In 1996, sales were lower to Germany and the United Kingdom but higher to the United States, Middle East and Latin America (where Brazil is emerging as a good buyer).

Such growth, as new markets constantly emerge, is the underlying strength of the gold jewelry industry.

# Gold Jewelry Is for Everyone

As I remarked in my book, *The World of Gold*: "Gold jewelry has become a mass-market consumer item anywhere from Birmingham (England or Alabama) to Berlin, Bahrain, Bombay, Bangkok and Beijing... Gold jewelry is for everyone, everywhere."

The star consumers are India (over 11 million ounces annually), the United States (nearly 10 million ounces), China (over eight million ounces) and Saudi Arabia (five million ounces).

But watch out for Indonesia, where consumption among its 200 million people has soared 60% since 1992, to four million ounces.

Although Indonesia is rapidly becoming a significant gold producer too, rising consumer demand will continue to exceed local mine output there for many years.

And keep an eye on Turkey, where jewelry fabrication is up over two million ounces because of strong exports to eastern Europe and the Commonwealth of Independent States (the former Soviet

Union). Consumption in Poland has doubled since 1990; the prospect through the millennium is that the Commonwealth of Independent States could become a good jewelry market.

# A Mullitude of Nathurs

In short, if you are a gold miner you are not dependent solely on the fortunes of a single emerging prosperous nation (such as China), but rather can count on a multitude of nations. Worldwide gold consumption will exceed the supply from gold mines well beyond the year 2000.

While that demand underpins the gold price, it does not necessarily drive the price ever upward. Aboveground stocks, whether as jewelry scrap or in central bank vaults, are substantial. These stocks are what fill the shortfall from new mine production.

Experience shows, however, that this gold comes to market in remarkably measured quantities. Relatively little extra scrap was generated by the gold price surge above \$410 in early 1996, for example.

# The Role of Central Banks

Central banks are active in today's gold market. They lend gold into it, they trade in it (mainly through derivative instruments), and they occasionally make quite large sales. Belgium completed a sale of 6.5 million ounces in 1996, bringing its total sales since 1989 to over 22 million ounces, but this was all handled discreetly without any disruption to the market.

Moreover, the governor of the National Bank of Belgium has confirmed that other (unidentified) central banks bought at least part of

At this showroom in Riyadh, Saudi Arabia, gold jewelry is a mass-market consumer item.



this gold and that no further disposals were planned.

The Dutch central bank also sold 9.6 million ounces last year, arguing that it wanted to bring its gold holdings more in line with those of its European partners.

The International Monetary Fund too has been discussing sale of a little gold, but so far has been unable to secure approval of its members.

# **New European Currency**

Undoubtedly the most important question for the gold market in the next two years is the role that gold will play as backing for the new European currency, the Euro, due to be launched on January 1, 1999.

The Euro will be issued by a new European Central Bank. In establishing its initial reserves, this bank will call on the central banks of its participating member countries to contribute about \$67 billion from their own reserves, mainly in the form of dollars and gold.

But how much gold will actually be pooled into the European Central Bank reserve? And what will happen to it thereafter? Moreover, what will happen to the gold that still remains in the reserves of national central banks such as Germany's Bundesbank or the Banque de France?

These questions are crucial. European Union central banks hold almost 460 million ounces of gold, over 40% of all official holdings worldwide. The destiny of this gold is of great significance. Will the new European Central Bank or the national central banks sell any gold? Or simply sit on it?

No clear policy has yet been announced. The signals that have emerged, however, are encouraging. Terry Smeeton, head of foreign exchange at the Bank of England,



Almost one-third of all the gold ever mined is held in official gold reserves of central banks.

has spoken of the "uncertain wisdom" of central banks disposing of an asset that has served them so well in the past, adding that the risk of European central bank sales may be "exaggerated."

# Let Sleeping Dogs Lie

Alain Duchateau, head of foreign exchange and reserves at the Banque de France, told an international banking conference that gold sales might shake the public's confidence in the Euro currency and upset a smooth transition to its launch. He concluded, "It is better to let sleeping dogs lie."

In short, gold will play a leading role as permanent backing for the Euro currency. The prospect of large European central bank sales is unlikely. Central bankers want an orderly gold market.

A final word came from Hans Tietmeyer, president of Germany's Bundesbank, who said early in 1997 (after the Dutch central bank sale was revealed) that the leading European countries did not intend to sell more gold "for the time being."

# **Not Too Much Excitement**

The message, therefore, is not to expect too much excitement, but rather a relatively steady gold price, supported by jewelry buyers around the globe. Stability of price, of course, is precisely the reason for gold's historic reputation; it was a secure benchmark and you held it to preserve your wealth, not to make a killing in an uncertain world. That remains its best credential.

Gold may also be a bargain. The thoughtful British economic commentator, Hamish McRae, wrote recently that in real terms, "Gold is now not only cheaper than it was for the last 40 years of the nineteenth century; it is also back to the average price of the last 130 years."

The headline for his article, in *The Independent* newspaper, was: "Why wise men will be thinking about gold investments now."

Timothy Green's latest book, The World of Gold, may be purchased from The Gold Institute in Washington, D.C. (telephone: 202 835-0185).

### Financial Review

Echo Bay lost money in 1996. Two principal factors were responsible for this.

First, the company is investing heavily for the future — \$63.6 million in 1996 — in exploration and development projects aimed at expanding the company's gold reserves and production. At yearend, two of these projects added a total of 2.1 million ounces of gold to Echo Bay's reserves: Aquarius in Canada and Paredones Amarillos in Mexico. When in full production in 1999, these two new mines will add 240-250,000 ounces of gold to Echo Bay's annual production.

Second, the company took special one-time charges totaling \$107.1 million to write off the Alaska-Juneau project and to solve a waste rock instability problem at the McCoy/Cove mine in Nevada. Both are described in detail in note 6 on page 45.

These two factors, when combined with the increased costs of mining deeper levels at the McCoy/Cove and Lupin mines, resulted in a 1996 net loss of \$176.7 million, or \$1.31 per share.

#### **Cash Position**

Despite the net loss for the year, the company had \$103.2 million in cash holdings at year's end. In January 1997, the company received an additional \$63.3 million in cash by closing out its entire gold and silver forward sales position, taking advantage of the decline in precious metals prices to three-year lows.

There has been no change in the company's hedging policy. The gold and silver forward sales position was replaced by the gold and silver put options and call options described in note 15 beginning on page 51.

#### **Production and Costs**

In 1996, Echo Bay produced 768,919 ounces of gold, up from 754,762 ounces in 1995. Silver production fell by 40% as expected, to 7.1 million ounces from 11.9 million ounces, reflecting the much lower silver grades in the deeper areas of the McCoy/ Cove mine.

Consolidated cash operating costs were \$254 per ounce of gold produced, up 11% from a year earlier, principally due to the increased costs associated with declining grades and deeper mining at McCoy/Cove.

Revenues were \$337.3 million, compared with \$360.7 million a year ago. The lower revenues reflected the decreased silver production, only partly offset by the increased gold production.

#### **Building for the Future**

In January, the company announced plans to bring two new gold mines into production, Aquarius in Canada and Paredones Amarillos in Mexico. These new mines represent the first returns to the company's aggressive exploration and development program of the last two years.

Aquarius is expected to produce an average of 166,000 ounces of gold a year at an average cash operating

cost of \$218 per ounce. Startup is expected in late 1998, with full production in early 1999.

Paredones Amarillos is 60%-owned by Echo Bay. It is expected to produce an average of 128,000 ounces of gold a year (Echo Bay's 60% share, 77,000 ounces) at an average cash operating cost of \$223 per ounce. Startup is expected in late 1998, with full production in late 1998 or early 1999.

The company plans to finance
Aquarius with a new \$75 million
unsecured credit facility. Paredones
Amarillos is to be financed with a
\$36 million non-recourse project
loan. Most of the remaining funds
will come from cash on hand and
operating cash flow from Echo
Bay's four existing gold mines.

#### **Dividend Policy Change**

In addition, the company announced in January that it will suspend payment of dividends on its common shares, applying those funds instead to constructing the new mines.

The company believes that share-holder interests are best served by using the company's cash resources to build a foundation for sustained future value rather than making short-term cash payouts at this time.

Consolidated Balance Sheet December 31		
Millions of U.S. dollars	1996	1995
Assets		
Current assets:  Cash and cash equivalents	\$103.2	\$185.8
Interest and accounts receivable	9.7	14.7
Inventories (note 1)	33.9	34.2
Prepaid expenses and other assets	6.6	5.4
	153.4	240.1
Plant and equipment (note 2)	234.0	255.9
Mining properties (note 2)	405.0	318.2
Long-term investments and other assets (note 4)	<b>39.7</b>	57.0
	\$832.1	\$871.2
Liabilities and Shareholders' Equity Current liabilities: Accounts payable and accrued liabilities Income and mining taxes payable Gold and other financings (note 5) Deferred income (note 5)	\$ 72.4 3.6 129.4 0.9	\$ 61.8 2.5 41.1 25.1
	206.3	.130.5
Gold and other financings (note 5)	53.5	. 111.7
Deferred income (note 5)	1.6	
Other long-term obligations (note 6) Deferred income taxes	70.0 8.4	32.0 8.1
Descried income taxes	0.7	0,1
Commitments and contingencies (notes 15 and 16)		
Common shareholders' equity: Common shares (note 10), no par value, unlimited number authorized; issued and outstanding – 139,355,781 shares		
(129,880,804 shares in 1995)	709.5	619.0
Deficit	(201.9)	(15.1)
Foreign currency translation	(15.3)	(15.0)
	492.3	588.9
	\$832.1	\$871.2

See accompanying summary of significant accounting policies and notes.

On behalf of the Board:

Robert L. Leclerc, Q.C. Director

Latham C. Burns
Director

## Management's Discussion and Analysis

#### **Balance Sheet Discussion**

The consolidated balance sheet presents the company's assets, liabilities and shareholders' equity at the end of each of the past two years.

#### **Assets**

Current assets are those that could be converted into cash within the next fiscal year.

At December 31, 1996, the company had a total of \$103.2 million in cash and cash equivalents. In January 1997, Echo Bay received an additional \$63.3 million in cash by repurchasing a 218,000-ounce gold swap and all of the company's gold and silver forward sales positions, as described in note 15 beginning on page 51.

Plant and equipment and mining properties are the assets from which the company generates its revenues. Mining properties represent investments made in the acquisition and development of ore bodies. Details are given in note 2 on page 42.

1996 capital expenditures totaled \$104 million, including \$49 million at producing mines and \$31 million at development properties. 1997 capital expenditures are planned at \$190 million.

Long-term investments and other assets include the company's investment in common shares of its strategic alliance and joint venture partners. Details are given in note 4 beginning on page 43.

#### Liabilities

Gold and other financings are reported in two parts. The amounts due for repayment in 1997 are reported as current liabilities at year-end 1996. The non-current portion consists of all other financings. Details are given in note 5 on pages 44-45.

Deferred income is also reported partly as current (the amount to be credited to revenue in the next year) and partly as non-current. There is no financial obligation to be met in either case.

Other long-term obligations are described in note 6 on page 45. The increase in 1996 was principally a result of the \$30.0 million provision made for pit wall stabilization at the McCoy/Cove mine and the \$20.0 million provision for estimated reclamation and closure costs at the Alaska-Juneau property.

Deferred income taxes are taxes not payable currently, due to timing differences resulting from the recognition of revenue and expenses in different periods for tax and accounting purposes.

Common shares increased primarily due to the issuance of 8.8 million common shares of Echo Bay to the shareholders of Santa Elina Gold Corporation in order to increase Echo Bay's interest in Santa Elina to 50% from 7% in July 1996. The transaction is described in note 3 on pages 42-43.

#### **Gold and Silver Loans**

Echo Bay was the first North American mining company to use gold and silver loans of significance. We use this type of borrowing to finance acquisitions of new mines and expansions at our existing properties.

To understand how these loans work, think of an ounce of gold or silver as a unit of currency. There are many thousands of tons of both metals locked away in bank vaults earning no interest, in fact incurring fees to store and insure.

We borrow some of this metal from a bank, and we pay interest on the loan. The rate is low (often under 2%) because banks pay no interest on gold and silver deposits — in fact, they charge their customers a fee to store the customers' gold in their vaults.

We immediately sell this borrowed metal on the open market and use the proceeds, in dollars, to pay for our acquisition or expansion. We repay the bank, usually over five years, in ounces of gold or silver produced by the mine that was financed.

For financial reporting purposes, we record the debt in U.S. dollars

at the price received for the metal when we sold it (see "Gold and other financings" on the balance sheet).

At every subsequent balance sheet date, we remeasure the value of the metal we owe by its then-current market price. The difference between this value and the original loan proceeds is reclassified on the balance sheet as "Deferred income" instead of "Gold and other financings," and then transferred into "Revenue" on the earnings statement when the production related to the loan is repaid.

When we repay the bank, we' reduce the loan account on the balance sheet by the ounces repaid times the market price at the most recent balance sheet date, and we include the same amount in "Revenue" on our earnings statement.

Using a precious metal loan, we have effectively hedged future production at the original price received for the metal.

So there are two benefits to Echo Bay in gold and silver loans: a low interest rate, and a hedge against future metal price fluctuations.

except for per share data Revenue	1996	1995			1994
	\$ 337.3	\$360.7			\$377.6
Expenses:		1			
Operating costs	221.1	· 212.2			201.1
Royalties (note 16)	9.7	8.4			10.0
Production taxes	2.4	4.3			6.5
Depreciation and amortization	86.5	89.4			85.6
Reclamation and mine closure	6.3	5.0			4.7
General and administrative	13.6	12.2			10.4
Exploration and development	63.6	69.8			46.6
Interest and other (note 7)	3.1	4.2			(0.3
Provision for Alaska-Juneau	77.1				
development property (note 6) Provision for McCoy/Cove pit wall	//• <b>I</b>				
stabilization (note 6)	30.0	_			
	513.4	405.5			364.6
Earnings (loss) before income taxes	(176.1)	(44.8)			13.0
ncome tax expense (recovery) (note 8)	0.6	(3.2)			(4.3)
Earnings (loss) before preferred stock dividends Preferred stock dividends of	(176.7)	(41.6)			17.3
subsidiary (note 11)	· —	8.5			9.3
Net earnings (loss)	\$(176.7)	\$ (50.1)		ļ	\$ 8.0
Earnings (loss) per share	\$ (1.31)	\$ (0.43)	,	,	\$ 0.07
Weighted average number of shares outstanding 13	4,434,054	116,233,019	- 11	12,5	13,622

of Retained Earnings (Deficit) Year ended December 31			
Millions of U.S. dollars	1996	1995	1994
Balance, beginning of year Net earnings (loss)	\$ (15.1) (176.7)	\$ 44.1 (50.1)	\$44.6 8.0
	(191.8)	(6.0)	52.6
Dividends on common shares (note 10) Excess of redemption price of preferred shares redeemed over	(10.1)	(9.0)	(8.5)
original proceeds (note 11)		(0.1)	. —
	(10.1)	(9.1)	(8.5)
Balance, end of year	\$(201.9)	\$(15.1)	\$44.1

See accompanying summary of significant accounting policies and notes.

#### **Earnings Statement Discussion**

The consolidated statement of earnings summarizes Echo Bay's revenue, expenses, and earnings or loss for the past three years.

Revenue is derived from the sale of gold and silver bullion. Revenue varies with the volume of production and price received. Although the company's McCoy/Cove mine is one of the largest silver producers in the world, the significant majority of revenues is derived from gold sales. The price of gold and silver is affected by many factors beyond the company's control.

In 1996, additional revenue from increased gold production did not offset the revenue decline from decreased silver production. In 1995, the decreased revenue resulted from lower gold production, partly offset by higher silver production. Production by mine is given on pages 58-60.

Hedged position — Echo Bay has a policy of selling a portion of its production forward to ensure its ability to meet cash commitments. The company also borrows gold and silver (see "Gold and Silver Loans" on page 35), which it sells to partially finance acquisitions and the expansion and development of its properties, making gold and silver repayments from future production.

The company's policy is to commit up to one-third of its anticipated annual gold production to forward sales and loan repayments, and up to one-half of its projected silver production. In 1996, the company delivered 25% of its gold production and 45% of its silver against forward sales and loan obligations.

If the company's total hedged position were to have been "marked to market" or liquidated at year-end 1996, then a gain of \$79.9 million would have resulted, as set out in note 15 on page 53.

In January 1997, the company closed out its entire gold and silver forward sales position, realizing cash proceeds of \$63.3 million as described in note 15 on pages 51-52. The company replaced this hedge position with the gold and silver put options and call options itemized in note 15.

Operating costs include mining and processing costs for gold and silver sold during the year. These vary with the quantities sold and the cost of production.

The average cash operating cost per ounce of gold produced was \$254 in 1996, \$229 in 1995 and \$209 in 1994. Unit costs rose in both 1995 and 1996 principally because lower-grade ores were mined.

Royalties are described in note 16 on page 54. The increased 1996 expense reflected higher production levels at Round Mountain and Kettle River, partly offset by lower production at McCoy/Cove.

Production taxes decreased in 1996 due to lower production and higher costs at the Nevada mines. Higher costs reduce the net profit on which the production taxes are calculated.

Depreciation is the allocation of the cost of movable assets, such as plant and equipment, over their estimated useful lives. Depreciation was \$64 per ounce in 1996, \$61 in 1995 and \$56 in 1994.

Amortization refers to the spreading of the company's investment in ore bodies over their estimated lives. The amount amortized in any given period depends on the quantity of gold and silver mined. The quantities of the company's proven and probable reserves and other mineralization also affect amortization expense. Amortization was \$34 per ounce in 1996, \$36 in 1995 and \$33 in 1994.

Reclamation and mine closure expenses were \$6.3 million in 1996, \$5.0 million in 1995 and \$4.7 million in 1994.

General and administrative costs rose in 1995 and 1996, reflecting increased support for permitting, exploration and business development activities.

Exploration and development expenses were \$63.6 million in 1996, \$69.8 million in 1995 and \$46.6 million in 1994, reflecting increased international exploration activities and business development activities, partly offset by a reduction in activity and personnel at the Alaska-Juneau development project in 1996.

*Interest and other* expenses are described in note 7 on pages 45-46.

Provision for Alaska-Juneau development property represents the company's entire remaining investment in the Alaska-Juneau project, \$57.1 million, plus a \$20.0 million reserve to cover estimated reclamation and closure responsibilities. Details are provided in note 6 on page 45.

Provision for McCoy/Cove pit wall stabilization represents the estimated cost to remove the waste rock from an unstable portion of

the pit wall at the McCoy/Cove mine, as discussed in note 6 on page 45.

*Income tax expense* is described in note 8 on pages 46-47.

Preferred stock dividends of subsidiary reflect the dividends paid on the convertible preferred shares, net of related interest rate swap income (note 11 on page 48). The entire issue of convertible preferred stock was eliminated in 1995, eliminating the preferred share dividend requirement.

Net loss was \$176.7 million (\$1.31 per share) in 1996 after the special one-time provisions for the Alaska-Juneau development property and the McCoy/Cove pit wall stabilization. In 1995, the net loss was \$50.1 million (\$0.43 per share), compared with net earnings of \$8.0 million (\$0.07 per share) in 1994.

Despite the net losses in 1995 and 1996, the company had \$103.2 million in cash holdings at year-end 1996 and sufficient financial resources to pursue additional acquisition, investment, exploration and development programs as opportunities arise.

## Retained Earnings (Deficit) Statement Discussion

This statement discloses the change in retained earnings resulting principally from the net earnings (loss) and the dividends on common shares.

Consolidated Statement of Cash Year ended December 31	Flow		
Millions of U.S. dollars	1996	. 1995	1994
Cash Provided by (Used in):			
Operating Activities			
Net earnings (loss)	\$(176.7)	\$ (50.1)	\$ 8.0
Add (deduct):	567	56.2	527
Depreciation Amortization	56.7 29.8	56.2 33.2	53.7 31.9
Preferred stock dividends of	27.0	J.2	51.7
subsidiary (note 11)	*	8.5	9.3
Provision for McCoy/Cove pit wall			
stabilization (note 6)	30.0	· · · ·	
Provision for Alaska-Juneau development property (note 6)	77.1	· · · · · · · · · · · · · · · · · · ·	
Non-cash portion of exploration and	, //•±	•	
development expense	7.0	9.4	8.9
Deferred income taxes	0.3	(0.4)	(5.7
Environmental expenses at		10.0	
non-producing properties	(4.4)	12.9 (5.5)	(1.3
Gain on sale of assets Other	6.0	2.1	3.3
Working capital provided by operations	25.8	66.3	108.1
Change in cash invested in working			
capital related to operations:			
Interest and accounts receivable	(0.2)	(2.7)	1.8
Inventories	1.4	(3.6)	0.5
Prepaid expenses and other assets	(0.4)	(0.1)	(1.8
Accounts payable and accrued liabilit. Income and mining taxes payable	ies 3.2 0.1	6.7 0.7	(12.2
meonic and mining taxes payable	29.9	67.3	92.2
Financing Activities	27.7	- 707.3	) has o he
Currency borrowings	34.7	28.0	
Debt repayments	(38.2)	(9.9)	(84.8
Preferred stock dividends of			
subsidiary (note 11)		(8.5)	(9.3
Common share dividends (note 10)	(10.1)	(9.0)	. (8.5
Preferred share conversions and redemptions (note 11)		(136.5)	·
Common shares issued on		(130.))	
acquisition of Santa Elina,			
net of issuance costs (note 3)	85.8	, , , , , , , , , , , , , , , , , , ,	· · · —
Common shares issues,	/ 0	1050	
net of issuance costs (note 10)	4.8	135.9	3.1
	77.0		(99.5
Investing Activities  Mining properties, plant and equipment	(102.7)	(01.5)	(25.0
Cost of Santa Elina acquisition (note 3)	(97.1)	(81.5)	(35.8
Short-term investments		* ************************************	234.4
Long-term investments and other assets	(3.5)	(47.6)	(10.7
Proceeds on sale of mining properties			
and long-term investments	13.8	44.7	
Other	1.0	1.4	1.7
NI:(1	(189.5)	(83.0)	189.0
Net increase (decrease) in cash and cash equivalents	(92.6)	(15.7)	100.0
Cash and cash equivalents,	(82.6)	(15.7)	182.3
beginning of year	185.8	201.5	19.2
beginning of year	103.0		

#### Cash Flow Statement Discussion

The consolidated statement of cash flow itemizes the company's sources and uses of cash.

Cash provided by (used in) operating activities consists of net earnings (loss), adjusted for items that do not involve the outlay or receipt of cash.

Cash provided by (used in) financing activities includes the issuance of common shares of Echo Bay on acquisition of additional shares of Santa Elina in 1996, redemption or conversion into common stock of the entire issue of convertible preferred stock in 1995, and all other financing-related proceeds and payments.

Cash provided by (used in) investing activities outlines the investment in assets to provide future benefits to shareholders.

Net increase (decrease) in cash and cash equivalents indicates the amount remaining as the result of these activities.

#### **Financial Position**

The company has sufficient resources and liquidity to pursue additional acquisition, investment and exploration programs.

The company will rely on its operating cash flow and existing credit facilities to fund its planned 1997 capital expenditures of \$190 million. At year-end 1996, the company had unutilized long-term credit facilities of \$112 million.

#### **Management's Responsibility** for Financial Reporting

The accompanying financial statements and related data are the responsibility of management. Management has prepared the statements in accordance with accounting principles generally accepted in Canada.

The integrity of the financial reporting process is also the responsibility of management. Management maintains systems of internal controls designed to provide reasonable assurance that transactions are authorized, assets are safeguarded, and reliable financial information is produced. Management selects accounting principles and methods that are appropriate to the company's circumstances, and makes decisions affecting the measurement of transactions in which estimates or judgments are required to determine the amounts reported.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting. The Board carries out this responsibility principally through its Audit Committee.

The Audit Committee consists entirely of outside directors. The Committee meets periodically with management, the internal auditors, and the external auditors to discuss internal financial controls, auditing matters and financial reporting issues. The Committee satisfies itself that each party is properly discharging its responsibilities; reviews the quarterly and annual financial statements and the external auditors' report; and recommends the appointment of the external auditors for review by the Board and approval by the shareholders.

The external auditors audit the financial statements annually on behalf of the shareholders. They also performed certain procedures related to the company's unaudited interim financial statements and report their findings to the Audit Committee. The external auditors have free access to the internal auditors, management, and the Audit Committee.

Bulord C Krous President and

Chief Executive Officer

Peter & Checubron Peter H. Cheesbrough Senior Vice President, Finance and Chief Financial Officer

January 27, 1997

#### **Auditors' Report**

To the Shareholders of Echo Bay Mines Ltd.

We have audited the consolidated balance sheet of Echo Bay Mines Ltd. as at December 31, 1996 and 1995 and the consolidated statements of earnings, retained earnings (deficit) and cash flow for each of the years in the three-year period ended December 31, 1996. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, the consolidated financial statements on pages 34, 36 and 38 present fairly, in all material respects, the financial position of the company as at December 31, 1996 and 1995 and the results of its operations and changes in its financial position for each of the years in the three-year period ended December 31, 1996 in accordance with accounting principles generally accepted in Canada.

Ernst + Young

Chartered Accountants Edmonton, Canada January 27, 1997

## Summary of Significant Accounting Policies

December 31, 1996

#### General

Echo Bay Mines Ltd. mines, processes and explores for gold and silver. Gold accounted for 89% of 1996 revenue, and silver 11%. The company has four operating mines: McCoy/Cove in Nevada, U.S.A.; Round Mountain in Nevada, U.S.A.; Lupin in Northwest Territories, Canada; and Kettle River in Washington, U.S.A. All are 100% owned except for Round Mountain, which is 50% owned.

The company's financial position and operating results are directly affected by the market price of gold in relation to the company's production costs. Silver price fluctuations also affect the company's financial position and operating results, although to a lesser extent. Gold and silver prices fluctuate in response to numerous factors beyond the company's control.

The consolidated financial statements are prepared on the historical cost basis in accordance with accounting principles generally accepted in Canada and, in all material respects, conform with accounting principles generally accepted in the United States (except as described in note 12 to the company's consolidated financial statements) and with International Accounting Standards. The statements are expressed in U.S. dollars.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Certain of the comparative figures have been reclassified to conform with the current year's presentation.

#### **Principles of Consolidation**

The consolidated financial statements include the accounts of the company and its subsidiaries. Interests in joint ventures are accounted for using the

proportionate consolidation method to consolidate the company's share of the joint ventures' assets, liabilities, revenues and expenses.

#### **Share Investments**

Common share investments are recorded using the cost method unless the company owns more than a 20% interest and can exercise significant influence, in which case the equity method is used. The cost method reports the investment at cost and the equity method reports the investment at cost adjusted for the company's pro rata share of the investee's undistributed earnings or losses since acquisition. A provision for loss would be recorded in income if there were a decline in market value of a share investment that is other than temporary.

#### **Foreign Currency Translation**

The company's self-sustaining Canadian operations are translated into U.S. dollars using the current-rate method, which translates assets and liabilities at the year-end exchange rate and translates revenue and expenses at average exchange rates. Exchange differences arising on translation are recorded as a separate component of shareholders' equity. The change in the balance is attributable to fluctuations in the exchange rate of U.S. dollars to Canadian dollars. The company's foreign operations that are not self-sustaining are translated into U.S. dollars using the temporal method, which translates monetary assets and liabilities at the year-end exchange rate, and translates additions to non-monetary assets and liabilities, revenue and expenses at average exchange rates. Exchange differences arising on translation are recorded in current earnings.

#### **Revenue Recognition**

Revenue is recognized when title to delivered gold or silver passes to the buyer.

#### **Earnings per Share**

Earnings per share is calculated based on the weighted average number of common shares outstanding during the year. Fully diluted earnings per share are the same as basic earnings per share because the company's outstanding options are not dilutive.

#### **Cash and Cash Equivalents**

The company considers to be cash equivalents all highly liquid debt instruments purchased with a maturity of three months or less.

#### **Inventories**

Precious metals inventories are valued at the lower of cost, using the "first-in, first-out" method, or net realizable value. Materials and supplies are valued at the lower of average cost or replacement cost.

#### **Plant and Equipment**

Plant and equipment are recorded at cost. Depreciation is provided using the straight-line method over each asset's estimated economic life to a maximum of 20 years.

#### **Mining Properties**

Producing mines' acquisition, exploration and development costs

Mining properties are recorded at cost of acquisition. Mine exploration and development costs include expenditures incurred to develop new ore bodies, to define further mineralization in existing ore bodies and to expand the capacity of operating mines. These expenditures are amortized against earnings on the unit-of-production method over the expected economic life of each mine.

#### Mining costs

Mining costs are the costs incurred to remove ore and waste from an open pit or underground mine. These costs are deferred when they relate to gold that will be produced in future years. They are charged to operating costs in the period in which the production occurs.

For open pit mining operations, mining costs are deferred when the ratio of tons mined per ounce of gold recovered exceeds the average ratio estimated for the life of the mine. These deferred costs are charged to operating costs when the actual ratio is below the average ratio.

For underground mining operations, these costs include the cost of accessing and developing new production areas.

#### Development properties

At properties identified as having development potential, the costs of acquisition, exploration and development are capitalized as they are incurred. If production commences, these costs are transferred to "producing mines' acquisition, exploration and development costs" and are amortized against earnings as described above. If a project is determined not to be commercially feasible, unrecoverable costs are expensed in the year in which the determination is made.

#### Exploration costs

The costs of exploration programs not anticipated to result in additions to the company's reserves and other mineralization in the current year are expensed as incurred.

Reclamation and mine closure costs
Estimated site restoration and closure costs for each producing mine are charged against operating earnings on the unit-of-production method over the expected economic life of each mine.

## Review of Life-of-Mine Plans and Carrying Values

Plant and equipment are depreciated and mining properties are amortized over their anticipated economic lives. Each year, the company estimates ore reserves and prepares a comprehensive mining plan for the then-anticipated remaining life of each property. The prices used in estimating the company's ore reserves at December 31, 1996 were \$375 per ounce of gold and \$5.00 per ounce of silver. The market prices were \$369 per ounce of gold and \$4.87 per ounce of silver at December 31, 1996. If the company were to determine that its reserves should be calculated at significantly lower prices, then ore reserves would likely be materially reduced.

Significant changes in the life-of-mine plans can occur as a result of mining experience, new ore discoveries, changes in mining methods and rates, process changes, investments in new equipment and technology, and other factors. Based on year-end ore reserves and each current life-of-mine plan, the company reviews its accounting estimates and makes needed adjustments. This complex process continues for the life of every mine.

The company reviews the carrying value of each producing mine by comparing the net book value with the estimated undiscounted future cash flow from the property. If the net book value exceeds the undiscounted future cash flow, then the excess is expensed. There has been no excess carrying value to be expensed in the three years ended December 31, 1996. Changes in the significant assumptions underlying future cash flow estimates may have a material effect on future carrying values and operating results.

Once major permits have been approved for a development property but a final construction decision has not yet been made, the company considers the uncertainty that the economics of the project may materially change if permits expire before a final construction decision is made, and records reductions in the property's book value when appropriate. Permits may not be renewable under the same terms and conditions as originally granted, and the grant of permits is often subject to appeal.

#### Capitalization of Interest

Interest cost is capitalized on construction programs until the facilities are ready for their intended use.

#### **Hedging Activities**

The company's profitability is subject to changes in gold and silver prices, exchange rates, interest rates and certain commodity prices. To reduce the impact of such changes, the company locks in the future value of certain of these items through hedging transactions. These transactions are accomplished through the use of derivative financial instruments, the value of which is derived from movements in the underlying prices or rates.

The gold- and silver-related instruments used in these transactions include commodity loans, fixed-forward and spot-deferred contracts, swaps and options. Sensitivity to changing metal prices is reduced, and future revenues are hedged, as the company's future production will satisfy these loans and other delivery commitments. The company engages in forward currencyexchange contracts to reduce the impact on the Lupin mine's operating costs caused by fluctuations in the exchange rate of U.S. dollars to Canadian dollars. The company also engages in crude oil hedging activities, including forward purchase agreements and swaps, to reduce the impact of fluctuations in crude oil prices on its operating costs. During 1995 and 1994, the company used interest rate swap agreements to effectively convert its fixed-rate preferred stock dividends into floating-rate dividends.

Gains and losses resulting from hedging activities are recognized in earnings on a basis consistent with the hedged item. When hedged production is sold, revenue is recognized in amounts implicit in the commodity loan, delivery commitment or option agreement. Gains or losses on foreign currency and crude oil hedging activities are recorded in operating costs, or capitalized in the cost of assets, when the hedged Canadian dollar transactions occur and when crude oil supplies are used in operations. Gains and losses on early termination of hedging contracts are deferred until the hedged items are recognized in earnings.

The carrying values of gold loans are remeasured using the market value of gold at the reporting date. Differences between these values and the loan proceeds that were originally received are recorded as deferred income and will be included in revenue when the production related to the loans is sold.

Under the interest rate swap agreements, the company received fixed-rate interest and paid interest based on the London Inter-Bank Offered Rate (LIBOR). The interest rate differential was recognized as an adjustment to dividends on preferred stock of subsidiary as the differential accrued.

## Notes to Consolidated Financial Statements

December 31, 1996

Tabular amounts in millions of U.S. dollars, except amounts per share and per ounce or unless otherwise noted

#### 1. Inventories

	1996	1995
Precious metals — bullion	\$ 4.2	\$ 5.9
— in-process	11.4	10.3
Materials and supplies	18.3	18.0
	\$33.9	\$34.2

#### 2. Property, Plant and Equipment

Net book value				
			1996	1995
Property				
and	Plant		Net	Net
percentage	and	Mining	Book	Book
owned	Equipment	Properties	Value	Value
McCoy/Cove				1, 3, 4
(100%)	\$ 82.3	\$ 91.6	\$173.9	\$205.5
Round Mountain				
(50%)	55.3	52.7	108.0	104.3
Lupin (including				
Ulu) (100%)	56.3	58.9	115.2	114.9
Kettle River (100%)	25.6	13.7	39.3	43.6
Alaska-Juneau				
(100%) (note 6)		_		61.2
Aquarius (100%)	0.1	14.8	14.9	8.9
Kingking (75%)	0.5	42.1	42.6	31.4
Paredones Amarillos				
(60%)	0.2	5.0	5.2	1.2
Santa Elina				
(51%) (note 3)	4.9	126.2	131.1	
Other	8.8	, , , , ,	8.8	3.1
	\$234.0	\$405.0	\$639.0	\$574.1

During 1995, the company and TVI Pacific formed alliances with Filipino corporations to create Kingking Mines Inc. ("KMI"), a corporation under the laws of the Republic of the Philippines. KMI has signed an option agreement to acquire a 100% interest in the Kingking project after completion of a bankable feasibility study and a \$67.0 million payment in 1998. A contingent payment of up to \$18.0 million also would be payable if there were a significant increase in mineralization at Kingking.

The company and its Philippine affiliates have an initial interest in the option of 75%, but the agreements provide for the acquisition and disposition of interests such that the interests of the company and its Philippine affiliates ultimately could be between 60% and 100% of the Kingking project.

#### Plant and equipment

		Net		Net
		Book		Book
	Cost	Value	Cost	Value
Land improvemer and utility	nts			
systems :	\$ 65.1	\$ 24.0	\$ 63.1	\$ 26.3
Buildings	161.8	57.4	160.1	68.1
Equipment	392.1	135.8	363.5	142.8
Construction in				
	16.8	16.8	18.7	18.7
progress	10.0			
	\$635.8	\$234.0	\$605.4	\$255.9
Mining propertie	\$635.8	\$234.0		
Mining propertie	\$635.8	\$234.0	\$605.4	\$255.9
	\$635.8 es acquisition,		\$605.4	\$255.9
Mining propertie	\$635.8  acquisition, developmen	nt costs	\$605.4 1996	\$255.9 1995
Mining propertie  Producing mines' exploration and	\$635.8  acquisition, developmen	nt costs	\$605.4 1996 \$388.5	\$255.9 1995 \$364.6
Mining properties  Producing mines' exploration and Less accumulated	\$635.8  acquisition, developmer amortization	nt costs	\$605.4 1996 \$388.5 250.6	\$255.9 1995 \$364.6 221.1
Mining propertie  Producing mines' exploration and	\$635.8  acquisition, developmer amortization perties' acqu	nt costs	\$605.4 1996 \$388.5 250.6	\$255.9 1995 \$364.6 221.1
Mining properties  Producing mines' exploration and Less accumulated  Development pro	\$635.8  acquisition, developmer amortization perties' acqu	nt costs	\$605.4 1996 \$388.5 250.6 137.9	\$255.9 1995 \$364.6 221.1 143.5

1996

#### 3. Santa Elina Acquisition

On July 16, 1996, the company completed a series of transactions with Santa Elina Gold Corporation ("Santa Elina") and Sercor Ltd. ("Sercor," a private company that owned 67% of Santa Elina). The transactions enabled the company to increase its ownership of the outstanding common shares of Santa Elina from 7% to 50% by issuing 8,830,915 common shares to the shareholders of Santa Elina. As a result, the company and Sercor each owned 50% of Santa Elina. Santa Elina holds interests in mining properties, principally in Brazil and also in Bolivia.

The company has accounted for the transactions as the purchase of an additional 43% of Santa Elina. Santa Elina has been consolidated into the company using the proportionate consolidation method, as the company and Sercor jointly control Santa Elina. Under the proportionate consolidation method, the company's share of Santa Elina's assets, liabilities, revenues and expenses are included in the company's consolidated financial statements. The company's share of Santa Elina's operating results is included in the company's consolidated results of operations from the date of acquisition.

The total cost of the transactions was \$106.0 million. This consists of \$13.1 million to purchase the company's initial 7% interest in Santa Elina, \$86.1 million to purchase the additional 43% interest in Santa Elina, the

\$5.3 million carrying value of the company's option to acquire a direct 50% interest in the Chapada property and \$1.5 million of transaction costs. The purchase price has been allocated to the net assets of Santa Elina based on the relative fair values.

The assigned value of assets and liabilities acquired at July 16, 1996, based on the consideration given, follows.

Assets	
Cash	\$ 2.0
Accounts receivable	0.6
Inventories	0.3
Plant and equipment	4.4
Mining properties	114.5
Long-term investments	0.9
	122.7
Liabilities	
Accounts payable and accrued liabilities	3.2
Current portion of financings	6.9
Other long-term obligations	6.6
	16.7
Net assets at assigned values	\$106.0

Summarized below are the unaudited pro forma operating results of the company, assuming the Santa Elina purchase had been consummated on January 1, 1995. These pro forma results are based upon historical results of operations and are not necessarily indicative of results that would have occurred.

	1996	1995
Revenue	\$ 337.3	\$360.7
Net loss	\$(180.0)	\$ (58.8)
Net loss per common share	\$ (1.29)	\$ (0.47)

Since the completion of the above transactions, the company increased its ownership in Santa Elina to 51% through additional share purchases of \$7.0 million (\$6.0 million in the fourth quarter of 1996 and \$1.0 million in the first quarter of 1997). The increased ownership does not affect the joint control of Santa Elina, and proportionate consolidation will continue to be used.

#### 4. Long-Term Investments and Other Assets

				1996				1995
	Number of	Percent	Market	Carrying	Number of	Percent	Market	Carrying
	Shares	Interest	Value	Value	Shares	Interest	Value	Value
Share investments at cost:								
TVI Pacific Inc.	14,016,845	15.4%	\$12.8	\$11.8	11,666,667	15.7%	\$18.7	\$ 7.6
Canarc Resources Corp.	3,000,000	9.0	3.7	4.2	3,000,000	10.5	3.1	4.1
Minefinders Corp.	1,280,000	15.0	2.8	2.0		、	<del></del> -	
Rift Resources Ltd.	1,000,000	9.8	1.1	1.5	******			*****
Cluff Resources plc					3,630,800	4.8	6.0	2.9
Santa Elina Gold Corp.								
(note 3)	· —				9,000,000	6.7		13.1
Other share investments			13.9	9.9		<u> </u>	8.2	8.3
			34.3	29.4			45.9	36.0
Equity investment in:								
Etruscan Enterprises Ltd.	* - * - <u></u>				4,175,275	27.0	12.8	8.9
			34.3	29.4			58.7	44.9
Property options				1.8				7.8
Other assets				8.5				4.3
O LITER WOODED				\$39.7				\$57.0

#### Share investments

The company has purchased common shares of exploration-oriented companies that give the company access to exploration and development prospects along some of the major gold belts of the world, including properties in Central and South America, West Africa and the Philippines.

In the first quarter of 1996, the company sold its investment in Cluff Resources plc for \$5.5 million. A gain of \$2.5 million was recorded on the sale.

#### Equity investment

In the fourth quarter of 1996, the company sold its investment in Etruscan Enterprises Ltd. in exchange for \$8.3 million cash and the 49% of the Kilgore exploration property in Idaho that it did not own. The company recognized a gain of \$1.9 million on this sale.

#### Property options

In several cases, the company paid a premium over the then-market value of the common shares of explorationoriented companies to fund exploration programs on certain properties and for the right to acquire direct interests in these properties. These amounts are being expensed as the exploration work is conducted, until development potential is established. The company holds options to purchase direct interests in these properties at purchase considerations dependent on the properties' reserves and other mineralization at the time of option exercise.

#### 5. Gold and Other Financings and Deferred Income

	Financings		Deferred	Income
	1996	. 1995	1996	1995
Gold swap	\$ 83.8	\$ 83.6	<b>\$</b> —	\$
Gold loans	33.7	41.1	2.4	27.2
Currency loan	33.8	_		
Debenture				
payable	28.0	28.1	<u>—</u>	
Other	3.6		0.1	(2.1)
	182.9	152.8	2.5	25.1
Less current				
portion	129.4	41.1	0.9	25.1
	\$ 53.5	\$111.7	\$1.6	\$ —

#### Gold swaps

Gold swaps refer to currency loans and related, independently arranged, future gold delivery commitments. Taken together, the loans and commitments create obligations effectively denominated in gold and represent hedges of future gold production. In 1990, bonds totaling \$84.0 million were swapped for an obligation to deliver 218,000 ounces of gold in September 1997, equivalent to a selling price of \$385 per ounce. The effective interest rate on the bond and swap arrangement was 3.54% at December 31, 1996.

Subsequent to December 31, 1996, the company repurchased its 218,000-ounce gold delivery commitment that hedged the \$84.0 million bond obligation described above (see also note 15). The \$84.0 million bond obligation has an effective interest rate of 10.34% and is expected to be repaid in March 1997.

#### Gold term loan and currency loan

At December 31, 1996, a 41,562-ounce term loan was outstanding under a gold loan agreement (60,200 ounces at December 31, 1995). Under an August 1996 amendment, this term loan will be repaid over five years. All deferred gains related to the gold loan have been recognized in 1996 on a basis that matched the production originally designated for delivery. The remaining commitment is priced at \$387.50 per ounce, based on the gold price at the date of rescheduling. For financial statement presentation, the outstanding gold loan was remeasured to \$369 per ounce, the gold price at December 31, 1996 (\$387 per ounce in 1995). Unrealized remeasurement gains or losses are included in deferred income. In August 1996, the company also borrowed an additional \$34.7 million in U.S. dollars to be repaid over five years.

The gold loan agreement contains both term and revolving provisions. At December 31, 1996, the company had no amounts outstanding, and \$100.0 million or gold equivalent available until 2001, under the revolving commitment.

The facility is convertible between gold and dollar borrowings. Interest on gold borrowings is calculated at the banks' gold rate plus 0.475%, and interest on dollar borrowings at LIBOR plus 0.475%. At December 31, 1996, the effective interest rates were 2.90% on the gold loan and 5.85% on the dollar borrowings.

#### Gold loan related to Swiss franc bonds

At December 31, 1995, the company's net gold delivery commitment related to the Swiss franc bond and swap arrangement was 118,990 ounces at approximately \$374 per ounce, including deferred amounts. In 1996, 69,267 ounces of gold were delivered and the remaining 49,723 ounce commitment was rescheduled into quarterly payments of 5,525 ounces beginning in the first quarter of 1997 and ending in the first quarter of 1999. All deferred gains related to the Swiss franc transactions have been recognized in earnings in 1996 on a basis that matched the production originally designated for delivery. The remaining commitment is priced at \$403 per ounce, based on the gold price at the date of rescheduling. The effective rate of interest on the remaining commitment was 2.75% at December 31, 1996.

For financial statement presentation, the remaining commitment was remeasured to \$369 per ounce, the gold price at December 31, 1996.

#### Debenture payable

A subsidiary of the company has issued a debenture in the amount of \$28.0 million, bearing interest at the onemonth discount rate for bankers' acceptances plus 0.325%. The interest rate was 3.44% at December 31, 1996. This debenture is payable in April 1997 and is secured by a letter of credit.

#### Other information

Certain of the company's financing arrangements require it to maintain specified ratios of assets to liabilities and cash flow to debt. The company is in compliance with these ratios and other covenant requirements.

The company had outstanding letters of credit of \$58.5 million at December 31, 1996, primarily related to the bonding of future reclamation obligations and to the debenture issued by a subsidiary of the company. Annual fees on the letters of credit range from 0.50% to 0.55%.

At December 31, 1996, the company had unutilized credit facilities of \$111.5 million, including the \$100.0 million or gold equivalent revolving commitment. Annual commitment fees on the unutilized credit facilities are 0,20%.

Interest payments were \$9.0 million in 1996, \$4.3 million in 1995 and \$7.2 million in 1994.

Future gold and silver delivery commitments are summarized by year in note 15.

#### 6. Other Long-Term Obligations

	1996	1995
Accrued reclamation and mine closure	\$33.3	\$30.9
Provision for Alaska-Juneau		
development property reclamation		
and closure costs	20.0	
Provision for McCoy/Cove		
pit wall stabilization	28.4	_
Property acquisition costs	1.5	1.8
Other	3.9	2.1
	87.1	34.8
Less current portion included in accounts		
payable and accrued liabilities	17.1	2.8
	\$70.0	\$32.0

#### Reclamation and mine closure

At December 31, 1996, the company's future reclamation and mine closure costs are estimated to be \$72.6 million, excluding Alaska-Juneau as described below. The aggregate obligation accrued to December 31, 1996, was \$33.3 million, including accruals of \$6.3 million at operating mines in 1996, \$5.0 million at operating mines and \$12.9 million at non-producing properties (note 7)

in 1995 and \$4.7 million at operating mines in 1994. The remaining \$39.3 million will be accrued on the unit-ofproduction method over the remaining life of each mine. Future reclamation costs are determined using management's best estimates of the scope of work to be performed and related costs. These estimates may change based on future changes in operations, cost of reclamation activities and regulatory requirements.

At December 31, 1996, the company recorded a provision of \$77.1 million for the Alaska-Juneau development property, including its \$57.1 million investment and \$20.0 million for estimated reclamation and closure costs. The provision resulted from a new feasibility study concluding that the project as currently designed would not be economically feasible (note 16).

Provision for McCoy/Cove pit wall stabilization In the third quarter of 1996, the company recorded a \$30.0 million provision related to the estimated costs to remove waste rock from an unstable portion of the Cove pit wall at the McCoy/Cove mine in Nevada. The cost estimate underlying the provision is based on a preliminary evaluation of the total tons to be removed and the associated costs, both of which will be further refined as McCoy/Cove completes its stabilization plan. This plan could affect a portion of McCoy/Cove ore reserves, if it is determined that the cost to remove waste rock renders the portion uneconomic. By December 31, 1996, total spending for the pit wall stabilization was \$1.6 million.

#### 7. Interest and Other

	1996	1995	1994
Interest income	\$(6.1)	\$ (9.9)	\$(10.2)
Interest expense	8.2	5.1	6.1
Gain on sale of Cluff Resources	S		
investment (note 4)	(2.5)		
Gain on sale of Etruscan			
equity investment (note 4)	(1.9)		
Summa litigation accrual			
(note 16)	1.5		****
Gain on sale of Kensington		(3.2)	
Gain on disposition of			
Muscocho shares	-	(2.1)	_
Environmental expenses at			
non-producing properties		12.9	_
Other	3.9	1.4	3.8
	\$ 3.1	\$ 4.2	\$ (0.3)

#### Gain on sale of Kensington

In June 1995, the company completed the sale of its 50% interest in the Kensington development project to its partner, Coeur d'Alene Mines Corp., for \$32.5 million and a scaled royalty on future production. A gain of \$3.2 million was recorded on the sale.

#### Gain on disposition of Muscocho shares

In June 1995, the company sold its 11,585,110 common shares of Muscocho Explorations Ltd., representing 24.8% of Muscocho's issued and outstanding capital, in a private transaction for \$2.1 million. A gain of \$2.1 million was recorded on the sale, as the company had written off its investment in Muscocho in 1990.

#### Environmental expenses

During 1995, the company increased its provision for future reclamation costs at non-producing properties by \$12.9 million, including \$11.7 million related to the Sunnyside mine in Colorado.

#### 8. Income Tax Expense

#### Geographic components

The geographic components of earnings before income tax expense and of income tax expense were as follows.

	1996	1995	1994
Earnings (loss) before			
income taxes:			
Canada	\$ (32.8)	\$(41.4)	\$(15.2)
United States and			
other	(143.3)	(3.4)	28.2
	\$(176.1)	\$(44.8)	\$ 13.0
Current income tax			
expense (recovery):			
Canada	\$ 0.4	\$(3.9)	\$ 0.3
United States and			
other	(0.1)	1.1	. 1.1
	0.3	(2.8)	1.4
Deferred income tax			
expense (recovery):			
Canada	0.2	(0.9)	(5.7)
United States and	·	( - /	(- 1, )
other	0.1	0.5	
	0.3	(0.4)	(5.7)
Income tax expense			
(recovery)	\$ 0.6	\$(3.2)	\$(4.3)

#### Deferred income taxes

The payment of certain income taxes is deferred due to the recognition of amounts for tax purposes in different periods than for accounting purposes. The principal timing differences and related tax effects were as follows.

	1996	1995	1994
Depreciation and			
amortization	\$0.1	\$ 0.5	\$(3.6)
Deferred mining costs	1,	. —	(1.5)
Exploration costs	. · <u> </u>		(1.4)
Non-deductible reserves			(0.4)
Non-capital losses		ordenments	0.2
Other	0.2	(0.9)	1.0
	\$0.3	\$(0.4)	\$(5.7)

#### Effective tax rate

The effective tax rate on the company's earnings differed from the combined Canadian federal and provincial corporate income tax rate of 43.2% in 1996, 43.2% in 1995 and 42.9% in 1994 for the following reasons.

	1996	1995	1994
Earnings (loss) before			
	\$(176.1)	\$(44.8)	\$ 13.0
Income tax effect of:			
Expected Canadian			
federal and provincial			
corporate income taxes	\$(76.1)	\$(19.3)	\$ 5.6
Operating loss from			
which no tax benefit			
is derived	64.7	14.8	at the section of
Canadian resource			
allowance and			
earned depletion	(0.4)	(1.5)	(0.2)
Foreign earnings subject to			
different income tax rates	11.8	1.8	(11.1)
Other items	0.6	- 1.0	1.4
Income tax expense			
(recovery)	\$ 0.6	\$ (3.2)	\$ (4.3)
Effective tax rate (current			
and deferred)	(0.4%)	7.2%	(33.3%)

#### Loss carryforwards

At December 31, 1996, the company had U.S. net operating loss carryforwards of approximately \$254 million to apply against future taxable income, and \$44 million to apply against future alternative minimum taxable income. These loss carryforwards do not include provisions for the Alaska-Juneau development property or for the McCoy/Cove pit wall stabilization costs (note 6), which have not yet been recognized for income tax purposes. The net operating loss carryforwards expire during 2001–2011. Additionally, the company has Canadian non-capital loss carryforwards of approximately \$24 million and net capital loss carryforwards of approximately \$7 million. The non-capital loss carryforwards expire in various amounts from 1998 through 2003. The net capital loss carryforwards have no expiration date.

In 1995, the company realized \$4.8 million from the conveyance of Canadian Development Expenses of \$32.8 million to a third party. The proceeds were recorded as a recovery of income taxes in 1995 because the expenses represented unrecorded loss carryforwards for accounting purposes. The arrangement included the issuance of debentures to the third party (note 5).

Income tax payments (recoveries)

Income tax payments (recoveries) were \$0.4 million in 1996, (\$3.6) million in 1995 and \$4.5 million in 1994.

#### 9. Preferred Shares

The company is authorized to issue an unlimited number of preferred shares, issuable in series. Each series is to consist of such number of shares and to have such designation, rights, privileges, restrictions and conditions as may be determined by the directors. No preferred shares are currently issued.

#### 10. Common Shares

Changes in the number of common shares outstanding during the three years ended December 31, 1996, were as follows.

	Number of Shares	Amount
Balance, December 31, 1993	112,213,496	\$480.0
1994: Exercise of share options Conversion of preferred	468,009	3.1
shares of subsidiary	298	
Balance, December 31, 1994	112,681,803	483.1
1995: Exercise of share options	282,306	1.5
Conversion of preferred shares of subsidiary		
(note 11)	16,916,695	134.4
Balance, December 31, 1995	129,880,804	619.0
1996: Exercise of share options Shares issued on acquisition of Santa Elina, net of issuance	644,062	4.7
costs of \$0.3 million (note 3)	8,830,915	. 85.8
Balance, December 31, 1996	139,355,781	\$709.5

The company has suspended payment of dividends beginning in 1997. This will save approximately \$21.0 million over the next two years for mine development, based on the company's prior practice of paying dividends totaling \$0.075 per share as was done in 1996, 1995 and 1994. Dividends payable to Canadian residents have been converted to and paid in Canadian dollars.

#### Shelf registration

Pursuant to a shelf registration statement filed with the United States Securities and Exchange Commission in 1994, the company may offer from time to time up to \$200 million in aggregate principal amount of debt securities, common shares, and/or guarantees of debt securities issued by Echo Bay Resources, Inc., a wholly owned subsidiary of the company.

In connection with the U.S. shelf registration, the company also filed a shelf debt prospectus and a shelf equity prospectus with Canadian securities regulatory authorities. Under these prospectuses, the company could issue up to \$125 million of debt securities and up to 10 million common shares.

#### Shareholder rights plan

Under the company's shareholder rights plan, if any person or group were to announce an intention to acquire, or were to acquire, 20% or more of the company's common shares without complying with the conditions of a "permitted bid," then the owners of each share of common stock (other than the acquiring person or group) would become entitled to exercise a right to buy one additional common share at 50% of the lowest share price on The Toronto Stock Exchange during the prior 90 days. The plan expires in 2004, subject to reconfirmation by shareholders in 1999.

A "permitted bid," which does not trigger the entitlement to acquire shares under the plan, is one that complies with applicable securities law in all jurisdictions where at least 5% of the company's common shares are owned; is made to all shareholders for all outstanding shares; is open for a minimum of 60 days; takes up no shares until at least 66<sup>2</sup>/<sub>3</sub>% of the outstanding shares have been tendered to the bid, including those owned by the acquiring person or group; and meets certain other conditions.

Employee share incentive plan and director equity plan These plans provide for the granting of options to officers, key employees, and eligible directors to purchase common shares. Outstanding share options under the plans are exercisable at prices equal to the market value on the date of grant. The option holder may exercise each share option over a period of 10 years from the date of grant. Options generally vest in 25% increments on the first, second, third and fourth year anniversaries following the grant date. Option prices are denominated in Canadian dollars.

Changes in the number of options outstanding during the three years ended December 31, 1996 were as follows.

	1 /			1 /
	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
Options outstanding, December 31, 1993	3,613,414	C\$11.24		C\$ —
1994: Options granted	615,618	15.80	55,200	14.63
Options exercised	(468,009)	8.78	uphamate.	_
Options forfeited	(16,400)	13.80	_	<u> </u>
Options outstanding, December 31, 1994	3,744,623	C\$12.29	55,200	C\$14.63
1995: Options granted	989,400	13.33	65,000	12.50
Options exercised	(317,755)	8.16		_
Options forfeited	(113,576)	13.06		
Options outstanding, December 31, 1995	4,302,692	C\$12.81	120,200	C\$13.48
1996: Options granted	1,065,130	12.26	40,000	18.25
Options exercised	(694,758)	10.86	(2,300)	14.63
Options forfeited	(244,247)	14.42	_	_
Options expired	(90,150)	14.88		
Options outstanding, December 31, 1996	4,338,667	C\$12.85	157,900	C\$14.67

The numbers of shares reserved for future grants at December 31, 1996 are 288,085 under the Employee Share Incentive Plan and 264,800 under the Director Equity Plan. The numbers and weighted average prices of shares exercisable under the Employee Share Incentive Plan are 2,282,905 at C\$12.70 at December 31, 1996; 2,502,927 at C\$11.82 at December 31, 1995; and 2,245,720 at C\$11.24 at December 31, 1994.

The numbers and weighted average prices of shares exercisable under the Director Equity Plan are 41,550 at C\$13.79 at December 31, 1996 and 13,800 at C\$14.63 at December 31, 1995.

Options outstanding at December 31, 1996 had the following characteristics.

	Employee	Snare	incentive	Pian
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C\$13.79

Number of Shares Outstanding	Exercise Price Range	Weighted Average Exercise Price of Shares Outstanding	Weighted Average Years Until Expiration	Number of Shares Exercisable	Weighted Average Exercise Price of Shares Exercisable
239,725	C\$ 5.75-C\$ 8.13	C\$ 5.97	6	224,925	C\$ 5.92
631,072	C\$ 8.88–C\$ 9.75	C\$ 9.12	3	631,072	C\$ 9.12
2,104,940	C\$10.70-C\$13.38	C\$12.20	8	576,371	C\$13.07
1,277,880	C\$15.75–C\$18.88	C\$16.46	8	804,912	C\$16.48
85,050	C\$19.13-C\$25.94	C\$21.40	5	45,625	C\$23.37
					Director Equity Plan
Number of Shares		Weighted Average Exercise Price of	Weighted Average Years	Number of Shares	Weighted Average Exercise Price of
Outstanding	Exercise Price Range	Shares Outstanding	Until Expiration	Exercisable	Shares Exercisable

C\$14.67

#### 11. Preferred Stock of a Subsidiary

157,900

There was no preferred stock of a subsidiary outstanding as of December 31, 1996. In July 1992, the company received net proceeds of \$136.3 million from the sale of 5.75 million shares of Series A cumulative preferred stock of a financing subsidiary, Echo Bay Finance Corp. Quarterly dividends were paid on the preferred shares totaling \$1.75 per share annually. On July 31, 1995, the preferred stock became redeemable, in whole or in part, at the option of the subsidiary.

C\$12.50-C\$18.25

In three separate calls for redemption during 1995, the entire issue of preferred shares was converted into common shares of the company at 2.985 common shares for each \$25 preferred share or redeemed for cash at \$26.225 per preferred share plus accrued dividends. During 1995, 5,667,437 preferred shares were converted into 16,916,695 of the company's common shares, and 82,313 preferred shares were redeemed for cash of \$2.2 million.

41,550

# 12. Differences Between Canadian and U.S. Generally Accepted Accounting Principles (GAAP)

U.S. GAAP financial statements

The company prepares its consolidated financial statements in accordance with accounting principles generally accepted in Canada. These differ in some respects from those in the United States, as described below.

In accordance with Canadian GAAP, certain long-term foreign exchange contracts are considered to be hedges of the cost of goods to be purchased in foreign currencies in future periods. Gains and losses related to changes in market values of such contracts are recognized as a component of the cost of goods when the related hedged purchases occur. Under U.S. GAAP, changes in market value would be included in current earnings.

In accordance with Canadian GAAP, certain share investments are carried at cost as long-term investments (note 4). These investments would be written down and a loss recognized in earnings only when there is a loss in value that is other than temporary. Under U.S. GAAP, these investments would be marked to market, with unrealized gains or losses excluded from earnings and reported as a separate component of common shareholders' equity, net of tax. The unrealized gain on share investments carried at cost is \$5.0 million after a nil tax effect as of December 31, 1996 (\$9.8 million at December 31, 1995).

In accordance with Canadian GAAP, the company uses the deferral method of accounting for income taxes. Under U.S. GAAP, the company would use the liability method of accounting for income taxes.

In accordance with Canadian GAAP, the cost of the Santa Elina acquisition included the market value of the 8.8 million common shares (\$9.75 per share or \$86.1 million) issued by the company on July 16, 1996 (note 3). Under U.S. GAAP, the cost would be determined based on the market value of the company's common shares on April 9, 1996, the date of the commitment agreement (\$13.875 per share or \$122.5 million). The difference between the methods would increase mining properties and common shares under U.S. GAAP by \$36.4 million(34) Additionally, in accordance with Canadian GAAP, the allocation of the purchase price of the Santa Elina acquisition does not include any adjustment for the effect of deferred income taxes. U.S. GAAP requires the recognition of deferred tax assets and liabilities for the tax effects of the differences between the allocated values and the tax bases of the assets acquired and the liabilities assumed. Under U.S. GAAP, the recognition of deferred taxes would increase mining properties and deferred income taxes by \$46.6 million, net of activity after acquisition of \$1.1 million.

In accordance with Canadian GAAP, the company's mining properties are amortized over proven and probable reserves and other mineralization. Under U.S. GAAP, only proven and probable reserves would be used as the basis for amortization. The difference between the two accounting principles is not material to the results of operations for any of the periods presented. On a cumulative basis under U.S. GAAP, mining properties and common shareholders' equity would be \$10.6 million lower and deficit would be \$10.6 million higher at December 31, 1996 (\$11.4 million lower and \$11.4 million higher at December 31, 1995).

The effects on the consolidated statement of earnings of the above differences would have been as follows.

	1996	1995	1994
Net earnings (loss) under Canadian GAAP Change in market value	\$(176.7)	\$(50.1)	\$ 8.0
of foreign exchange contracts  Application of liability method for accounting	2.2	3.6	4.2
for income taxes			(4.9)
Net earnings (loss) under U.S. GAAP	\$(174.5)	\$(46.5)	\$ 7.3
Earnings (loss) per share under U.S. GAAP	\$ (1.30)	\$(0.40)	\$0.07

Selected information from the consolidated balance sheets under Canadian and U.S. GAAP is as follows.

		1996		1995
	Canadian	U.S.	Canadian	U.S.
	GAAP	GAAP *	GAAP	GAAP
Long-term				
investments		_		
and other	1	71	9	
assets	\$ 39.7	\$ 54.6	\$ 57.0	\$ 78.5
Mining	1	- tre		
properties	\$405.0	\$477.5	\$318.2	\$306.8
Deferred				
income		e e		
taxes	\$ 8.4	\$ 55.0	\$ 8.1	\$ 8.1
Common				
shares	\$709.5	\$746.0	\$619.0	\$619.0
Deficit	\$201.9	\$202.5	\$ 15.1	\$ 18.7
Common				
shareholders'				
equity	\$492.3	\$533.1	\$588.9	\$599.0

Under U.S. GAAP, the 1996 common share issuance for the acquisition of Santa Elina and the 1995 preferred stock conversions to common shares would not have been shown in the consolidated statement of cash flow as they were non-cash transactions. Accordingly, common shares issued in acquisition of Santa Elina and the cost of the Santa Elina acquisition would have been reduced by \$86.1 million each for 1996, and preferred share conversions and common share issues would have been reduced by \$134.3 million each for 1995 on the consolidated statement of cash flow.

Effective January 1, 1996, for the purpose of preparing U.S. GAAP financial information, the company

adopted FASB Statement No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of," which requires impairment losses to be recorded on long-lived assets used in operations when indicators of impairment are present. Implementation of Statement No. 121 had no effect on the U.S. GAAP financial information of the company.

#### U.S. GAAP tax disclosure

Significant components of the company's deferred tax liabilities and assets under U.S. GAAP disclosure requirements would have been as follows.

		1996			1995
Cana	U.S. and da Other	Total	Canada	U.S. and Other	Total
Deferred tax liabilities:  Tax over book depreciation and depletion \$ 23	3.5 \$ 51.8	\$ 75.3	\$ 17.0	\$ 35.2	\$ 52.2
	7.5 <b>-</b>	7.5	8.0	\$ 37.2 	8.0
Total deferred tax liabilities 31	1.0 51.8	82.8	25.0	35.2	60.2
		107.0 22.9 31.8 8.1	5.3 22.6 2.5 1.3	87.7 — 11.3 6.9	93.0 22.6 13.8 8.2
Total deferred tax assets before allowance 39	0.2 130.6 6.0) (126.0)	169.8	31.7	105.9	
Total deferred tax assets 23	3.2 4.6	27.8	17.4	34.7	52.1
Net deferred tax liabilities \$ 7	7.8 \$ 47.2	\$ 55.0	, \$ 7.6	\$ 0.5	\$ 8.1

The net increase in the valuation allowance for deferred tax assets was \$56.5 million for 1996 and \$10.0 million for 1995.

#### Stock-based compensation

The U.S. Financial Accounting Standards Board ("FASB") Statement No. 123, "Accounting for Stock-Based Compensation," is applicable for fiscal years beginning after December 15, 1995 and gives the option to either follow fair value accounting or to follow Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB No. 25") and related Interpretations. The company has determined that it will elect to continue to follow APB No. 25 and related Interpretations in accounting for its employee and director stock options in financial information prepared in conformity with U.S. GAAP.

In accordance with Canadian GAAP and U.S. GAAP (under APB No. 25), the company does not recognize compensation expense for stock option grants in the earnings statement, as the market prices of the underlying stock on the grant dates do not exceed the exercise prices of the options granted.

Had the company adopted Statement No. 123 for its U.S. GAAP disclosure, the following net losses would have been reported.

·	1996	1995
Net loss under U.S. GAAP	\$(174.5)	\$(46.5)
Pro forma stock compensation expense,		
after a nil income tax effect	(2.8)	(0.4)
Pro forma net loss under U.S. GAAP	\$(177.3)	\$(46.9)
Pro forma loss per share		
under U.S. GAAP	\$ (1.32)	\$(0.40)

The company has utilized the Black-Scholes option valuation model to estimate the fair value of options granted, assuming a weighted average option life of six years, risk-free interest rates ranging from 5.40% to 6.64%, a 1% dividend yield, and a volatility factor of 40%. The weighted average fair value of options granted is estimated at \$4.18 per share in 1996 and \$4.37 per share in 1995.

#### Other

The estimated fair values of financial instruments are set out below and in note 15. The fair values were determined from quoted market prices.

		1996		1995
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Cash and cash				
equivalents	\$103.2	\$103.2	\$185.8	\$185.8
Long-term				
investments	\$ 39.7	\$ 44.7	\$ 57.0	\$ 70.7
Debenture payable and other currency				
loans	\$ 65.4	\$ 65.1	\$ 28.1	\$ 28.0

#### 13. Joint Ventures

Summarized below are the company's 50% interest in the Round Mountain mine and, in 1996, 51% interest in Santa Elina (note 3), accounted for by the proportionate consolidation method.

	1996	1995	1994
Revenues	\$ 79.9	\$ 67.8	\$ 79.8
Operating costs	(45.4)	(35.0)	(37.6)
Royalties	(6.5)	(5.3)	(6.8)
Production taxes	(0.9)	(0.7)	. (1.7)
Depreciation and			
amortization	(14.2)	(14.5)	(15.1)
Reclamation and			
mine closure	(0.9)	·	
Exploration	(2.9)	<del></del> .	· · · · · · · · · · · · · · · · · · ·
Other	(0.4)	(0.1)	0.1
Earnings before			
income taxes	\$ 8.7	\$ 12.2	\$ 18.7
Current assets	\$ 63.2	\$ 6.6	\$ 7.9
Non-current assets	237.3	102.9	101.9
Current liabilities	(16.5)	(7.9)	(13.8)
Non-current liabilities	(18.6)	(7.2)	(17.3)
Equity	\$265.4	\$ 94.4	\$ 78.7

(used) by:			
Operating activities	\$ 16.7	\$ 42.8	\$ 46.2
Investing activities	(20.9)	(15.4)	(2.7)
Financing activities	(3.3)	. —	
Net (decrease) increase in cash	\$ (7.5)	\$ 27.4	\$ 43.5

#### 14. Geographic Segment Information

Financial information regarding geographic segments is set out below.

	1996	1995	1994
Revenue:			
Canada ·	\$ 63.9	\$ 67.0	\$ 69.5
United States	273.4	293.7	308.1
	\$337.3	\$360.7	\$377.6
Earnings (loss) before			
income taxes:			
Canada	\$ (32.8)	\$ (41.4)	\$ (15.2)
United States	(143.7)	(2.5)	28.2
Brazil and other	0.4	(0.9)	
	(176.1)	(44.8)	13.0
Income tax expense			
(recovery)	0.6	(3.2)	(4.3)
Earnings (loss) before			
preferred stock dividends	(176.7)	(41.6)	17.3
Dividends on preferred			
stock of subsidiary		8.5	9.3
Net earnings (loss)	\$(176.7)	\$ (50.1)	\$ 8.0
Assets:			
Canada .	\$236.5	\$350.3	\$140.0
United States	406.7	488.3	741.6
Brazil and other	188.9	32.6	
Total assets	\$832.1	\$871.2	\$881.6

#### 15. Hedging Activities and Commitments

In the first quarter of 1997, the company repurchased its 218,000-ounce gold commitment which hedged the \$84.0 million bond obligation (note 5), and repurchased all of its gold and silver forward sales positions, which consisted of 654,000 ounces of gold with delivery dates ranging from 1997 to 2002 and 8.5 million ounces of silver with delivery dates ranging from 1997 to 1999. These transactions resulted in cash proceeds of \$63.3 million, which are expected to be used, together with existing cash, to repay the \$84.0 million bond obligation in March 1997. This \$63.3 million has been deferred and will be recognized in earnings as the formerly hedged gold and silver production is sold. The gain will be recognized in revenue as follows: \$14.1 million in

1997, \$14.8 million in 1998, \$27.7 million in 1999 and \$6.7 million in 2000 and beyond. To provide protection against a decrease in gold prices, the company purchased 450,000 ounces of gold put options and sold 300,000 ounces of gold call options for a net cost of \$0.4 million.

This note in the company's consolidated financial statements shows the company's pro forma hedge and commitments as of December 31, 1996, adjusted to reflect the first quarter 1997 transactions described above.

#### Gold and silver commitments

The company's pro forma gold and silver commitments as of December 31, 1996, adjusted to reflect the first quarter 1997 transactions described above, were as follows.

	Gold Loans (Ounces)	Average Price of Loans (per Ounce)
1997	27,569	\$400
1998	29,756	399
1999	15,367	393
2000	12,031	388
2001	6,563	388
	91,286	\$396

The delivery prices on the gold loans stated above represent the prices established per the gold loan agreements. Gold loans are remeasured at each balance sheet date, resulting in deferred losses of \$2.5 million at December 31, 1996. These losses are netted against deferred income and will be included in revenue when the production related to the loans is sold. See note 5.

The company's pro forma option position as of December 31, 1996, adjusted to reflect the first quarter 1997 transactions described above, was as follows.

	Put Options	Purchased	. Call Opt	tions Sold
	Ounces	Strike Price per Ounce	Ounces	Strike Price per Ounce
Gold 1997 1998	300,000	\$345 345	150,000 150,000	\$389 398
Silver 1997	1,440,000	\$345 \$5.40	1,440,000	\$394
	1,440,000	\$5.40	1,440,000	\$6.43

#### Currency position

The company's obligations to purchase Canadian dollars as of December 31, 1996 were as follows.

	Canadian Dollars	Exchange Rate (C\$ to U.S.\$1.00)
1997	\$ 26,200,000	1.49
1998	25,200,000	1.52
1999	25,200,000	1.56
2000	25,200,000	1.59
	\$101,800,000	1.54

#### Crude oil position

The company's swap contracts and forward purchase commitment as of December 31, 1996 were as follows.

	Barrels of Crude Oil Purchased	Price per Barrel
1997	397,000	\$17.95
1998	390,000	17.57
1999	20,000	17.63
	807,000	\$17.76

#### Other hedging activity information

The company assesses the exposure that may result from a hedging transaction prior to entering into the commitment, and only enters into transactions which it believes accurately hedge the underlying risk and could be safely held to maturity. The company does not actively engage in the practice of trading derivative securities for profit. The company regularly reviews its unrealized gains and losses on hedging transactions.

Shown below are the carrying amounts and unrealized gains or losses on the company's hedging positions at December 31, 1996 and 1995, and pro forma at December 31, 1996, adjusted to reflect the first quarter 1997 transactions described above.

	Carrying Amount	Unrealized Gain (Loss)	Carrying Amount	Unrealized Gain (Loss)
1996				1174
Gold swaps (note 5)	\$83.8	\$ 7.1	\$	\$
Gold loan (note 5)	33.7	· · · · · · · · · · · · · · · · · · ·	33.7	
Off-balance sheet instruments:			55.7	
Gold forward sales	phosphology ,	50.3	_	
Silver forward sales		8.8		
Gold options – puts	0.4		2.3	
– calls		***************************************	(1.5)	
Silver options – puts	1.0	(0.3)	1.0	(0.3)
– calls	(1.0)	1.0	(1.0)	1.0
Foreign currency contracts		10.0	_	10.0
Crude oil contracts	·	3.0	<u> </u>	3.0
		\$79.9		\$13.7

	Carrying Amount	Unrealized Gain (Loss)
1995		
Gold swaps (note 5)	\$101.5	\$ 3.6
Gold loan (note 5)	23.3	
Off-balance sheet instruments:		
Gold forward sales	. · · —	34.9
Silver forward sales		6.4
Gold and silver options – puts	0.9	(0.9)
– calls	(0.5)	2.0
Foreign currency contracts	·	7.8
Crude oil contracts		(0.3)
		\$53.5

Fair values are estimated for the contract settlement dates based on market quotations of various input variables. These variables are used in valuation models that estimate the fair market value.

The credit risk exposure related to all hedging activities is limited to the unrealized gains on outstanding contracts based on current market prices. To reduce counterparty credit exposure, the company deals only with large credit-worthy financial institutions, and limits credit exposure to each. In addition, to allow for situations where positions may need to be reversed, the company deals only in markets it considers highly liquid.

Most of the company's hedging transactions have no margin requirements. In some instances, however, mainly for the longer-term forward sales and options, margin deposits are required when the market value exceeds the contract value by a predetermined amount.

The fair value of the company's hedged position can be affected by market conditions beyond the company's control. The effect of changes in various market factors on

the company's pro forma outstanding hedged position at December 31, 1996, adjusted to reflect the first quarter 1997 transactions described above, would be as follows.

		Effect on Market Value of
	Amount	Hedged Position
	of Change	(Thousands of U.S.\$)
Change in:		
Gold prices	\$10.00/ounce	\$2,400
Silver prices	\$ 0.25/ounce	300
Canadian dollar	U.S.\$ 0.01	1,000
Crude oil prices	\$ 1.00/barrel	800
Interest rates		
(effect on gold		
and silver options		
and gold loans)	1%	750

Hedging gains and losses represent the difference between spot or market prices and realized amounts. Shown below are the hedging gains (losses) recognized in earnings.

	1996	1995	1994
Revenue:			
Gold loans and swaps	\$(3.9)	\$ (0.6)	\$ 3.3
Gold forward sales	1.5	2.9	(1.3)
Silver loans and swaps		·	7.5
Silver forward sales	1.9	1.9	(3.7)
Gold and silver options	0.5	0.4	1.1
Operating expenses:			
Foreign currency contracts	1.5	0.8	(0.7)
Crude oil contracts	1.1	0.3	(0.6)
Dividends on preferred			
stock of subsidiary:			
Interest rate swap		(0.5)	0.8
	\$ 2.6	\$ 5.2	\$ 6.4

#### 16. Other Commitments and Contingencies

#### Royalties

Round Mountain mine production is subject to a net smelter return royalty ranging from 3.53% at gold prices of \$320 per ounce or less to 6.35% at gold prices of \$440 per ounce or more. Its production is also subject to a gross revenue royalty of 3%, reduced to 1½% after \$75.0 million has been paid. For the period from inception through December 31, 1996, cumulative royalties of \$16.8 million have been paid on the gross revenue royalty.

McCoy/Cove production is subject to a 2% net smelter return royalty. This royalty is based on sales less certain deductions.

A portion of production from the Lamefoot area of the Kettle River mine is subject to a 5% net smelter return royalty. K-2 area production at Kettle River is subject to a 5% gross proceeds royalty and a net smelter return royalty ranging from 2% at gold prices of \$300 per ounce or less to 3% at gold prices of \$400 per ounce or more.

#### Operating lease commitments

The company's principal lease commitments are for office premises, aircraft and equipment. The company's commitments under the remaining terms of the leases are approximately \$23.7 million, payable as follows: \$5.9 million in 1997, \$2.8 million in 1998, \$2.7 million in 1999, \$2.5 million in 2000, \$2.5 million in 2001 and \$7.3 million thereafter.

#### Contingencies

At December 31, 1996, the company accrued \$20.0 million for estimated reclamation and closure costs associated with the Alaska-Juneau development property. Actual spending related to reclamation and closure costs may differ from the current estimate of \$20.0 million. The provision for future reclamation and closure costs is reviewed periodically and adjusted as additional information becomes available.

In 1995, Summa Corporation commenced in Nevada state court a lawsuit against the company and the predecessor owner of the McCoy/Cove and Manhattan mines, claiming improper deductions in calculation of royalties payable over several years of production at McCoy/Cove and the former Manhattan mine. Summa Corporation filed a motion for summary judgment seeking \$10.3 million for allegedly underpaid royalties plus interest. The court denied Summa's motion. The case is scheduled for trial in the spring of 1997. The company has accrued \$1.7 million related to the Summa litigation, including \$1.5 million in 1996.

#### 17. Quarterly Financial Highlights (Unaudited)

	Revenue	Net Loss	Loss per Share
1996			
First Quarter	\$ 67.8	\$ (16.2)	* * \$(0.12)
Second Quarter	95.1	(14.6)	(0.11)
Third Quarter	94.9	(42.4)	(0.31)
Fourth Quarter	79.5	(103.5)	(0.77)
Total	\$337.3	\$(176.7)	\$(1.31)
1995			
First Quarter	\$ 84.2	\$(11.7)	\$(0.10)
Second Quarter	90.6	(13.0).	(0.12)
Third Quarter	93.5	(8.7)	(0.08)
Fourth Quarter	92.4	(16.7)	(0.13)
Total	\$360.7	\$(50.1)	\$(0.43)

Included in the third quarter of 1996 is a \$30.0 million (\$0.22 per share) provision related to the estimated costs to remove waste rock from an unstable portion of the Cove pit wall at the McCoy/Cove mine in Nevada. Included in the fourth quarter of 1996 is a \$77.1 million (\$0.57 per share) provision to write off the \$57.1 million book value of the company's Alaska-Juneau development property in Alaska and to accrue \$20.0 million for estimated reclamation and closure costs at the site.

### Selected Financial Data

A Facts & Figures Database is available via the Internet or on computer diskette or computer printout at no charge. Please reach us on the Internet at www.echobay.com or write to Investor Relations at the address given on page 63.

<b>Eleven-Year Financial Data</b> Years ended December 31											
Millions of U.S. dollars, except for											
gold price and per share data	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
Earnings Statement Data											
Revenue	\$ 337.3	\$360.7	\$377.6	\$366.5	\$312.4	\$315.6	\$338.9	\$297.0	\$267.7	\$211.7	\$124.3
Average gold price realized per ounce	384	388	387	360	357	392	404	400	440	439	367
Pretax earnings (loss) before write-downs	(69.0)	(44.7)	13.0	. 9.7	(11.3)	9.2	13.9	39.8	68.9	61.7	32.0
Earnings (loss) before taxes	(176.1)	(44.7)	13.0	9.7	(29.4)	9.2	(68.2)	19.8	68.9	61.7	32.0
Net earnings (loss) before											
preferred share dividends	(176.7)	(41.6)	17.3	10.2	(27.4)	6.8	(59.7)	16.0	54.4	48.5	25.9
Net earnings (loss)	(176.7)	(50.1)	8.0	3.6	(31.7)	6.8	(59.7)	16.0	54.4	48.5	25.9
Earnings (loss) per common share	(1.31)	(0.43)	0.07	0.03	(0.30)	0.07	(0.60)	0.16	0.56	0.52	0.30
Effective tax rate	(0.4%)	7.2%	(33.3%)	(5.1%)	6.9%	25.8%	12.5%	19.1%	21.0%	21.4%	19.1%
Return on assets	(20.7%)	(5.7%)	0.9%	0.4%	(3.5%)	0.8%	(6.3%)	1.7%	7.5%	9.8%	7.9%
Return on invested capital	(23.8%)	(4.8%)	2.8%	2.1%	(2.9%)	1.8%	(5.9%)	3.0%	9.5%	12.2%	9.3%
Return on average											
common shareholders' equity	(32.7%)	(9.1%)	1.6%	0.7%	(6.8%)	1.5%	(12.5%)	3.2%	12.7%	16.0%	13.4%
Weighted average common											
shares outstanding (millions)	134.4	116.2	112.5	108.2	105.2	101.2	99.1	99.0	96.9	93.4	85.2
Balance Sheet Data											
Working capital (deficiency)	\$ (52.9)	\$109.6	\$186.2	\$148.9	\$ 31.1	\$ (14.1)	\$ (35.5)	\$ (45.3)	\$ 0.6	\$ 20.0	\$ (6.3
Current ratio	0.74	1.84	4.24	2.01	1.42	0.80	0.66	0.56	1.01	1.38	0.87
Total assets	\$832.1	\$871.2	\$881.7	\$990.5	\$936.6	\$875.0	\$908.7	\$992.1	\$863.9	\$579.0	\$415.5
Gold, silver and currency financings	182.9	152.8	132.7	217.4	220.1	233.7	372.0	380.7	275.7	139.7	119.1
Deferred income taxes	8.4	8.1	8.4	14.6	20.0	26.0	25.5	36.3	33.9	26.7	17.0
Preferred shares <sup>1</sup>			136.3	136.3	136.3						<u>:</u>
Common shareholders' equity	492.3	588.9	509.7	513.7	440.3	491.5	443.1	509.6	496.6	362.1	242.9
Common shares outstanding (millions)	139.4	129.9	112.7	112.2	105.2	105.1	99.1	99.0	98.9	95.0	91.0
Book value per common share	\$ 3.53	\$ 4.53	\$ 4.52	\$ 4.58	\$ 4.19	\$ 4.67	\$ 4.47	\$ 5.15	\$ 5.02	\$ 3.81	\$ 2.67
	+ 5-55	7	,								
Other Financial Data											
Cash dividends:		<b>*</b> • • •	A 0 =	A 0.1	d 70	¢ 77	¢ 76	¢ 73	¢ (0	¢ 50	¢ 41
Common shares	\$ 10.1	\$ 9.0	\$ 8.5	\$ 8.1	\$ 7.9	\$ 7.7	\$ 7.4	\$ 7.2	\$ 6.8	\$ 5.8	\$ 4.1
Preferred shares <sup>1</sup>		8.5	10.1	10.1	4.3	07.0	00.5	06.1	00.2	80.4	40 1
Working capital from operations	25.8	66.3	108.1	107.5	76.5	87.8	90.5	96.1	90.3	80.4	48.1
Capital, investment and		4.00.0	((0	111	01 6	101	01.2	220.0	250 1	152 1	100.0
exploration spending	161.7	138.3	66.8	44.4	81.4	. 65.6	91.2	238.8	358.1	153.1	190.8
United States accounting: <sup>2</sup>	40.15	(/		0.5	(20 ()	0.0	((0.0)	25 (	70.7	41.1	20.0
Earnings (loss) before taxes	(173.9)	(41.2)	17.2	9.7	(29.4)	9.2	(68.2)	25.6	79.7	46.4	30.8
Net earnings (loss)	(174.5)	(46.5)	7.3	8.5	(31.7)	6.8	(59.7)	21.8	64.6	33.2	25.2
Earnings (loss) per common share	(1.30)	(0.40)	0.07	0.08	(0.30)		(0.60)	0.22	0.67	0.36	0.30
Total assets	919.6	881.3	872.6	975.2	917.1	854.2	907.8	980.7	847.4	555.4	414.2
Gold, silver and currency financings	182.9	152.8	132.7	217.4	220.1	233.7	391.3	385.2	275.7	139.7	119.1
Common shareholders' equity	533.1	599.0	500.6	503.3	420.8	470.7	422.9	493.7	480.0	339.1	242.1

<sup>&</sup>lt;sup>1</sup>Convertible preferred shares were issued in 1992 and redeemed in 1995 by a

subsidiary, Echo Bay Finance Corp. <sup>2</sup>The company's consolidated financial statements are prepared in accordance with

accounting principles generally accepted in Canada, which differ in some respects from those in the United States. The effects on the consolidated financial statements of such differences are summarized here. See also note 12 beginning on page 49.

### Ore Reserves and Other Mineralization

#### **Ore Reserves**

"Ore Reserves" refer to the tonnage and grade of an economically and legally extractable ore body. Echo Bay's reserves are minable reserves. They include allowance for dilution of ore in the mining process; they do not reflect any subsequent losses in leaching or milling. Securities regulations in both Canada and the United States set strict requirements for proven and probable ore reserves.

-Proven Reserves can be accurately estimated by establishing the size, shape and mineral content of an ore body by inspection and closely spaced samples.

---Probable Reserves have reasonable geologic continuity but cannot be considered proven because inspection and measurement locations are not detailed enough to estimate as accurately the size, shape and mineral content of the ore body.

#### Other Mineralization

"Other Mineralization" is called "Possible Ore Reserves" in Canada (in the United States, only "Proven and Probable Ore Reserves" can be referred to as "Reserves"). It is calculated in accordance with Canadian securities regulations. "Possible Ore" means material for which quantitative estimates are based largely on broad knowledge of the geological character of the deposit and for which there are fewer samples or measurements than for reserves; the quantitative estimates are based on an assumed continuity or repetition for which there are reasonable geological indications, including comparison

#### Proven and Probable Reserves<sup>1</sup>

	1996				1995	
	Tons <sup>2</sup> (000)	Grade <sup>3</sup> (oz./ton)	Content <sup>4</sup> (000 oz.)	Tons <sup>2</sup> (000)	Grade <sup>3</sup> (oz./ton)	Content <sup>4</sup> (000 oz.)
Gold						
Producing Mines:						
McCoy/Cove	35,379	0.033	1,183	47,221	0.032	1,526
Round Mountain (50%)	238,255	0.019	4,525	254,410	0.020	5,000
Lupin	1,576	0.281	443	2,445	0.280	. 685
Kettle River	1,987	0.186	370	1,602	0.206	330
		1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	6,521	,	4	7,541
Development Properties Owned: <sup>5</sup>						
Alaska-Juneau <sup>6</sup>			0	67,063	0.051	3,442
Aquarius	21,730	0.059	1,277			, 0
Paredones Amarillos (60%)	23,972	0.032	775			0
,			2,052	· · · · ·		3,442
Total gold		,	8,573			10,983
Silver						,
Producing Mines:						
McCoy/Cove	35,379	1.52	53,858	47,221	1.33	62,913
Total silver			53,858	٠.		62,913

<sup>&</sup>lt;sup>1</sup>Echo Bay's share, estimated at year-end. Calculations for both 1996 and 1995 were based on a gold price of \$375 per ounce and a silver price of \$5.00 per ounce for producing mines and development properties owned. For development properties optioned, Chapada's other mineralization was based on estimates prepared by Santa Elina Gold Corporation assuming a gold price of \$400 per ounce and a copper price of \$1.00 per pound; Kingking's other mineralization was based on estimates prepared by Benguet Corporation assuming a gold price of \$340 per ounce and a copper price of \$1.00 per pound.

The cutoff grades (minimum grades that can be mined and processed economically) are 0.006 gold-equivalent ounce/ton for oxides and 0.034 for sulfides at McCoy/ Cove, 0.006 for oxides and 0.010 for nonoxides at Round Mountain, 0.161 at upper levels of the mine and 0.225 at lower levels at Lupin, 0.102 for Lamefoot and  $0.\bar{140}$ for K-2 at Kettle River, 0.015 at Paredones Amarillos and 0.013 at Aquarius.

The prospective open pit mining waste-to-ore ratios are 2.8:1 at McCoy/Cove, 1.55:1 at Round Mountain, 4.15:1 at Paredones Amarillos and 5.6:1 at Aquarius. The prospective gold recovery rates are estimated to be 74% at McCoy/Cove, 63% at Round Mountain, 93% at Lupin, 86% at Kettle River, 91% at Paredones Amarillos and 95% at Aquarius. Recovery rates are calculated on a weighted-average basis for all material processed by all methods at each property.

<sup>&</sup>lt;sup>2</sup>To convert from tons to tonnes, multiply by 0.90718. To convert from tonnes to tons, divide by 0.90718.

<sup>&</sup>lt;sup>3</sup>To convert grade from ounces/ton to grams/tonne, multiply by 34.2857. To convert grade from grams/tonne to ounces/ton, multiply by 0.029167.

<sup>4</sup>To convert content from ounces to tonnes, divide by 32,150.8. To convert content

from tonnes to ounces, multiply by 32,150.8.

<sup>&</sup>lt;sup>5</sup>Assumes successful completion of permitting and financing for each property. <sup>6</sup>Written off in 1996.

<sup>&</sup>lt;sup>7</sup>Assumes the company earns and exercises its right to acquire the indicated interest in the optioned property. Echo Bay's policy is to classify this mineralization as inferred until Echo Bay completes its own feasibility study on an optioned property.

8 Echo Bay owns an option entitling it to acquire a 50% direct interest in Chapada from Santa Elina Gold Corporation. In addition, Echo Bay owned 7% of the

common shares of Santa Elina at year-end 1995 and 51% of the common shares at year-end 1996, giving Echo Bay indirect Chapada interests of 6% and 42% respectively. Until a decision is made on exercising the option, Echo Bay will continue to show its Chapada interest at 50%.

<sup>&</sup>lt;sup>9</sup>Echo Bay owns an option to acquire up to a 75% interest in Kingking through various foreign subsidiaries and alliances with Filipino affiliates.

with deposits of similar type. Bodies that are completely concealed may be included if there is specific evidence of their presence.

At Echo Bay, completion of an initial feasibility study is required for inclusion of mineralization in this category.

—Measured: That portion of "Other Mineralization" which has been explored at locations such as outcrops, trenches, workings and drill holes; quantity and grade and/or quality are estimated from the result of detailed sampling. The sites for inspection, sampling and measurement are spaced so closely and the geological character is so well defined that size, shape, depth and mineral content of the resource are well established.

—Indicated: That portion of "Other Mineralization" which has quantity and grade and/or quality estimated from information similar to that used for Measured, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for Measured, is high enough to assume geological continuity between points of observation.

—Inferred: That portion of "Other Mineralization" estimated from geological evidence and assumed continuity in which there is less confidence than for Measured and Indicated. The Inferred category is supported by fewer samples or measurements than for Indicated, and by reasonable geological, geochemical, geophysical or other geoscientific data.

Other Mineralization <sup>1</sup>								
				1996			·	1995
	Meas	ured and I	ndicated	,	Inferred	1	Total	Total
	Tons <sup>2</sup>	Grade <sup>3</sup>	Content <sup>4</sup>	Tons <sup>2</sup>	Grade <sup>3</sup>	Content <sup>4</sup>	Content <sup>4</sup>	Content <sup>4</sup>
	(000)	(oz./ton)	(000 oz.)	(000)	(oz./ton)	(000 oz.)	(000 oz.)	(000 oz.)
Gold								
Producing Mines:								
McCoy/Cove	1,473	0.029	42			0	. 42	243
Round Mountain (50%)	18,373	0.022	399	34,585	0.011	383	782	780
Lupin (including Ulu)	1,459	0.297	434	1,906	0.320	610	1,044	1,092
Kettle River	146	0.185	27	136	0.176	24	51	204
			902			1,017	1,919	2,319
Development Properties Owned:	5							
Alaska-Juneau <sup>6</sup>			0			0	0	1,571
Aquarius			0	,		0	0	1,300
Paredones Amarillos (60%)			0			0	0	651
			0			0	0	3,522
Development Properties Options	<b>d:</b> <sup>7</sup>							
Chapada (50%)8			0	56,700	0.012	660	660	660
Kingking (75%) <sup>9</sup>			. 0	168,750	0.017	2,850	2,850	2,850
			0			3,510	3,510	3,510
Total gold			902			4,527	5,429	9,351
Silver								
Producing Mines:								/ / * **
McCoy/Cove	1,473	1.36	2,001			0	2,001	4,415
Total silver			2,001			0	2,001	4,415
							Total	Total
	Tons <sup>2</sup>	Grade	Content	Tons <sup>2</sup>	Grade	Content	Content	Content
	(000)		(million lb.)	(000)	(%)	(million lb.)	(million lb.)	(million lb.)
Copper								
Development Properties Optione	ed: <sup>7</sup>				- (-	100	100	100
Chapada (50%)8			0	56,700	0.43	486	486	486
Kingking (75%) <sup>9</sup>			0	168,750	0.47	1,586	1,586	1,586
Total copper			0			2,072	2,072	2,072

## Operating Data

#### Current information is available during the year at www.echobay.com

Consolidated Production and Cost Data											
	1996	1995	1994	1993	1992	-1991	1990	1989	1988	1987	1986
Gold production (000 ounces) Silver production (000 ounces)	768.9 7,102.3	754.8 11,905.8	817.9 10,443.2	873.9 12,454.3	764.2 7,921.5	733.9 5,619.0	817.0 2,083.7	717.2 2,358.2	. 585.0 -1,009.4	500.5 446.3	320.7 162.5
Average gold-to-silver price ratio Year-end gold-to-silver price ratio	75:1 76:1	74:1 76:1	73:1 79:1	85:1 77:1	87:1 90:1	89:1 92:1	82:1 94:1	70:1 76:1	67:1 68:1	65:1 70:1	74:1 70:1
Cost per ounce of gold produced: Cash operating cost <sup>1</sup> Royalties Production taxes	\$254 11 3	. \$229 . 9 . 5	\$209 10 7	\$209 8 5	\$232 . 7 . 3	.\$244	\$244 12 4	\$220 10 3	\$211 13 4	\$207 15 1	\$192 . 6
Total cash costs Depreciation and amortization Reclamation	268 98 7	243 97 6	226 89 5	222 88 5	242 98 5	254 93 5	260 88	233 75	228 66 1	223 45	199
Total production costs General and administrative Exploration expense Development properties expense Write-downs Provision for McCoy/Cove Interest and other Income taxes	373 16 54 20 89 35 4	346 13 51 25 — — 5 (4)	320 11 28 20 —————————————————————————————————	315 9 13 11 — 2 (1)	345 12 47 21 21 9 0 (3)	352 13 7 — — 8 3	348 11 12 — 97 — 14 (10)	308 13 16 	295 16 31 —————————————————————————————————	268 16 17 — — — 2 26	255 16 9 — — — —
	\$592	\$436	\$374	. \$349	\$391	\$383	\$472	\$377	\$342	\$329	\$299

<sup>&</sup>lt;sup>1</sup>Effective January 1, 1996, Echo Bay adopted the new Gold Production Cost Standard developed by the Gold Institute as a means of facilitating meaningful comparisons among companies through uniform presentation of all cost data industry-wide. This

table converts the "cash production costs" reported by Echo Bay in all prior years into pro forma "cash operating costs" in accordance with the new standard. In Echo Bay's case, there is no material difference between the two.

Mine Operations Data											
	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
McCoy/Cove (100% owned)	/ /		-	,			7		-		
Gold produced (000 ounces)	271.7	310.0	359.4	395.6	301.5	284.3	255.0	214.6	104.0	. 90.8	14.0
Silver produced (000 ounces)	7,102.3	11,905.8	10,443.2	12,454.3	7,921.5	5,619.0	1,982.5	2,259.7	764.1		
Heap leached:											
Ore processed (tons/day)	16,671	11,966	21,682	24,090	24,806	14,214	15,684	15,649	8,069	11,791	6,235
Days of operation	364	364	364	371	364	364	364	364	371	364	87
Total ore processed (000 tons)	6,068	4,355	7,892	8,938	9,029	5,174	5,709	5,696	2,994	4,292	532
Gold grade (ounce/ton)	0.018	0.018	0.013	0.017	0.014	0.020	0.021	0.020	0.053	0.040	0.038
Silver grade (ounce/ton)	0.27	0.49	0.48	0.88	0.60	0.69	0.20	0.44	1.14		
Gold and silver recovery rates <sup>1</sup>											
Gold recovered (000 ounces)	66.8	59.9	66.6	100.1	77.6	85.3	75.8	85.9	104.0	90.8	14.0
Silver recovered (000 ounces)	513.2	877.5	940.7	2,406.9	1,130.9	949.1	354.9	819.5	764.1	, i	
Milled:											
Ore processed (tons/day)	9,031	7,275	7,307	7,708	6,794	6,753	6,486	7,461	to minute	· ·	
Days of operation	364	. 364	364	. 371	364	364	340	182			
Total ore processed (000 tons)	3,287	2,648	2,660	2,860	2,473	2,458	2,205	1,358	· ·		_
Gold grade (ounce/ton)	0.086	0.113	0.140	0.113	0.110	0.094	0.097	0.107	· · ·		Transpare
Silver grade (ounce/ton)	3.14	5.27	5.29	4.62	4.55	2.69	1.32	3.21	أجست		_
Gold recovery rate (%)	79.5	82.4	80.3	90.0	83.6	86.1	85.2	86.8	٠		_
Silver recovery rate (%)	73.5	78.8	70.1	71.0	65.0	71.8	58.1	34.3	-	·	
Gold recovered (000 ounces)	204.9	250.1	292.7	295.5	224.0	199.0	179.2	128.7	-photosonic	. · · · <u></u> ·	_
Silver recovered (000 ounces)	6,589.1	11,028.3	9,502.5	10,047.4	6,790.6	4,669.9	1,627.5	1,440.1			
Mining cost/ton of ore and waste	\$0.72		\$0.68	\$0.74	\$0.72	\$0.84	\$0.83	\$0.66	\$0.73	\$0.83	n.a.
Heap leaching cost/ton of ore	\$1.68	\$2.32	\$1.09	\$1.29	\$1.31	\$2.08	\$1.85	\$1.84	\$2.75	\$1.56	n.a.
Milling cost/ton of ore	\$9.50	\$10.67	\$10.09	\$9.28	\$10.74	\$10.17	\$12.66	\$9.04			

<sup>&</sup>lt;sup>1</sup>The gold recovery rate is estimated at 68% for crushed ore and 48% for uncrushed, run-of-mine ore. The silver recovery rate is estimated at 35% for crushed ore and

10% for uncrushed, run-of-mine ore. Actual recoveries will not be known until leaching is complete.

Mine Operations Data (continued	l)										
	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
Production cost per ounce of gold produce	d: <sup>2,3</sup>										
Direct mining expense	\$286	\$206	\$191	\$187	\$257	\$281	\$340	\$231	\$243	\$296	\$235
Deferred stripping cost Inventory movements and other	(16)	15	6	3	(24)		(68)	(19)	(54)		_
	1	(4)	(3)		(3)	5	. (2)	(1)	13	(103)	(40)
Cash operating cost	271	217	194	190	230	249	270	211	202	193	195
Royalties Production taxes	5 4	5 7	6	5	4	4	. 4	4	9	14	13
			9	7	4	3	5	4	10	4	
Total cash costs  Depreciation	280	229	209	202	238	256	279	219	221	211	208
Amortization	71 46	53 46	48 43	41 45	53 47	54 46	61	43	47 20	2	9
Reclamation	. 8	5	5	5	4	40	35	22	20	27	127
Total production costs	\$405	\$333	\$305	\$293	\$342	\$360	\$375	\$295	\$288	\$240	\$344
Capital expenditures (millions)	\$7.3	\$8.6	\$5.2	\$6.7	\$24.4	\$8.7	\$17.8	\$103.1	\$111.7	\$40.3	\$2.3
Deferred mining expenditures (millions)	\$6.0	\$(7.3)		\$(1.5)	\$9.5	\$12.7	\$17.8	\$4.8	\$6.2	940.J —	\$2.5 —
Round Mountain (Echo Bay's 50% inter	4)										
Gold produced (000 ounces)	205.5	172.2	211.8	187.3	185.3	169.5	241.6	159.3	116.9	95.3	83.8
Heap leached on reusable leach pads:	2000	1/2.2	211.0	10/.3	10).5	109.3	241.0	177.5	110.9	77.3	03.8
Ore processed (tons/day) (100%)	27,737	22,490	18,980	28,329	43,947	44,339	43,766	44,070	35,637	31,482	18,770
Days of operation	354	354	355	361	355	355	355	355	362	355	355
Total ore processed (000 tons) (100%)	9,819	7,961	6,738	10,227	15,601	15,740	15,537	15,645	12,902	11,176	6,663
Grade (ounce/ton)	0.036	0.034	0.040	0.033	0.036	0.031	0.037	0.029	0.029	0.027	0.033
Recovery rate (%)	66.1	70.9	78.7	69.4	58.1	65.9	74.7	64.8	63.7	63.8	69.0
Gold recovered (000 ounces) Heap leached on dedicated leach pads:	115.7	96.0	108.4	128.4	155.9	160.7	215.9	143.1	116.9	95.3	83.8
Ore processed (tons/day) (100%)	87,706	66,197	54,161	39,379	2,615						
Days of operation	354	354	355	361	355					<u> </u>	
Total ore processed (000 tons) (100%)	31,048	23,434	19,227	14,216	928			_		_	
Grade (ounce/ton)	0.011	0.012	0.014	0.014	0.022			_		-	_
Recovery rate <sup>4</sup>											
Gold recovered (000 ounces)	83.5	69.4	86.8	31.2	—	_	_	—	_	_	_
Recovered in gravity plant:				265	26.5						
Gold recovered (000 ounces) Other: <sup>5</sup>	6.3	6.1	16.5	26.7	26.0	_		_	_		_
Gold recovered (000 ounces)		0.7	0.1	1.1	3.4	8.8	25.7	16.2			
Mining cost/ton of ore and waste	\$0.69	\$0.61	\$0.53	\$0.60	\$0.62	\$0.68	\$0.70	\$0.63	\$0.57	\$0.50	\$0.58
Heap leaching cost/ton of ore	\$0.80	\$0.65	\$0.66	\$0.91	\$1.54	\$1.66	\$1.74	\$1.54	\$1.75	\$1.60	\$1.18
Production cost per ounce of gold produced											
Direct mining expense	\$228	\$218	\$156	\$205	\$204	\$233	\$177	\$244	\$252	\$240	\$161
Deferred stripping cost	(2)	(23)	8	(7)	5	1	19	(21)	(44)		16
Inventory movements and other	(5)		12	3	4	(6)	2	(1)	(4)	(4)	5
Cash operating cost	221	195	176	201	213	228	198	222	204	185	182
Royalties	32	31	32	26	24	26	29	28	28	29	13
Production taxes	4	4	8	5	3	5	7	6	. 8	3	4
Total cash costs	257	230	216	232	240	259	234	256	240	217	199
Depreciation	51	62	51	67	49	54	39	. 50	28	18	19
Amortization	18	20 5	20 4	20 4	19 3	19 3	19	18	12	11	12
Reclamation	5	\$317	\$291	\$323	\$311	\$335	\$292	\$324	\$280	\$246	\$230
Total production costs	\$331		\$8.7	\$6.6	\$12.4	\$3.9	\$5.4	\$18.6	\$38.6	\$20.2	\$5.5
Capital expenditures (millions)  Deferred mining expenditures (millions)	\$17.5 \$0.4	\$11.7 \$4.0	\$(1.7)	\$1.3	\$(0.9)		\$(4.7)	\$3.3	\$5.1	\$4.9	\$1.3
<b>Lupin</b> (100% owned)	166.0	172.1	180.1	217.5	214.5	216.9	195.2	195.6	202.4	193.1	193.2
Gold produced (000 ounces)	166.8	1/2.1	160.1	21/.)	217.)	210.)	1 / ) - 60	177.0	202.1	1/3.1	175.4
Milled: Ore processed (tons/day)	2,111	1,986	2,241	2,297	2,043	1,998	1,903	1,893	1,860	1,859	1,782
Days of operation	364	364	364	371	364	364	364	364	371	364	364
Total ore processed (000 tons)	768	723	816	852	744	727	693	689	690	677	649
Total ore processed (ovo tono)											

<sup>&</sup>lt;sup>2</sup>Effective January 1, 1996, Echo Bay adopted the new Gold Production Cost Standard developed by the Gold Institute as a means of facilitating meaningful comparisons among companies through uniform presentation of all cost data industry-wide. This table converts the "cash production costs" reported by Echo Bay in all prior years into pro forma "cash operating costs" in accordance with the new standard. In Echo Bay's case, there is no material difference between the two.

 <sup>&</sup>lt;sup>3</sup>To convert costs per ounce of gold into comparable costs per ounce of co-product silver, divide by the year's average gold-to-silver price ratio.
 <sup>4</sup>Estimated at 50%. Actual recoveries will not be known until leaching is complete.
 <sup>5</sup>A small satellite mine and mill at Manhattan, Nevada became part of the Round Mountain joint venture on February 1, 1989.

Mine Operations Data (continued)	)										
•	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
Grade (ounce/ton)	0.235	0.258	0.238	0.272	0.308	0.317	0.299	0.301	0.309	0.300	0.313
Recovery rate (%)	92.5	92.5	92.9	93.7	93.5	94.2	94.2	94.3	94.9	95.2	95.3
Mining cost/ton (Canadian dollars)	C\$44.08	C\$44.23	C\$40.45			C\$34.77			C\$31.02	C\$26.56	
Milling cost/ton (Canadian dollars)	C\$12.39					C\$18.47			C\$21.04		C\$23.77
Production cost per ounce of gold produced	.2										
Direct mining expense (Canadian dollars)		C\$423	C\$375	C\$291	C\$288	C\$285	C\$314	C\$306	C\$245	C\$268	C\$239
Deferred mine development	C\$ (4)	C\$ (22)	C\$ (4)	C\$ 5	C\$ 1	C\$ (3)	C\$ (36)	C\$ (22)	C\$ (16)	C\$ (16)	
Inventory movements and other	C\$ 1	C\$ 4	C\$ 4	C\$ 13	C\$ (3)	) C\$ (13)	C\$ (10)			C\$ (11)	
Cash operating cost (Canadian dollars)	C\$408	C\$405	C\$375	C\$309	C\$286	C\$269	C\$268	C\$273	C\$251	C\$241	C\$247
Cash operating cost (U.S. dollars)	\$299	\$296	\$274	\$240	\$238	\$235	\$229	\$231	\$204	\$182	\$178
Royalties	_	_			_		_	_	_	_	_
Production taxes			half-partners.	_	<del></del>	_	-		_		
Total cash costs	299	296	274	240	238	235	229	231	204	182	178
Depreciation	71	. 68	64	59	. 57	52	. 57	46	39	37	36
Amortization	21	19	16	17	16	. 18	17	14	16	13	12
Reclamation	8	7	, 6	7	. 6	7	_		_	<del>-</del>	·
Total production costs	\$399	\$390	\$360	\$323	\$317	\$312	\$303	\$291	\$259	. \$232	\$226
Capital expenditures (millions)	\$15.7	\$14.5	\$8.5	\$4.5	\$12.8	\$9.0	\$11.6	\$14.4	\$19.8	. \$7.2	\$11.2
Deferred mining expenditures (millions)	\$0.2	\$2.8	\$0.5	\$(0.9)	\$(0.3)	\$0.6	\$6.0	\$3.8	\$2.7	\$2.4	\$1.4
Kettle River (Echo Bay's 100% interest in	1993-96;	70% in 19	90-92)								
Gold produced (000 ounces) Milled:	124.9	100.4	66.8	73.4	62.9	63.2	58.3		. —	<u> </u>	_
Ore processed (tons/day) (100%)	1,652	1,504	1,438	1,551	1,805	1,772	1,559	<u> </u>	. —	,	_
Days of operation	364	364	364	371	. 364	364	336	_		·	
Total ore processed (000 tons) (100%)	601	548	523	575	657	645	524		_	. —	
Grade (ounce/ton)	0.240	0.212	0.149	0.146	0.155	0.164	0.194				_
Recovery rate (%)	86.5	86.6	85.6	87.7	87.9	85.5	88.0	. —	· —	· —	,—
Mining cost/ton of ore	\$21.12	\$22.60	\$11.06	\$16.12	\$21.77	\$23.64	\$20.23	. —	_	1 - J <del></del>	
Milling cost/ton of ore	\$11.96	\$12.76	\$13.54	\$12.80	\$12.66	\$12.73	\$14.88				_
Production cost per ounce of gold produced											
Direct mining expense	\$190	\$237	\$225	\$281	\$296	\$300	\$265				_
Deferred mine development	1		- 1 - <del></del>	·	6	(7)		,——	, <del></del>		-
Inventory movements and other	11	(7)	28	. (6)	(15)	5	(18)			· <u>-</u>	
Cash operating cost	201	230	253	275	287	298	247				
Royalties	10	. 8	5	10	1	-		· —	· ` —		_
Production taxes	2	2	2	2	2	- 2	1				
Total cash costs	213	240	260	287	. 290	300	248	-			
Depreciation	59	74	95	76	. 79	78	68	-		_	
Amortization	45	45	45	. 53	156	. 72	59		_	· · · · · · · · · · · · · · · · · · ·	_
Reclamation	8	7	6	. 2	. 7	. 5	·	—	· ·	_	- 3
Total production costs	\$325	\$366	\$406	\$418	\$532	\$455	\$375	-			_
Capital expenditures (millions)	\$8.8	\$9.5	\$10.0	\$7.9	\$7.4	\$4.3	\$3.5				
Deferred mining expenditures (millions)			_	-		\$(0.4)		·			

<sup>&</sup>lt;sup>2</sup>Effective January 1, 1996, Echo Bay adopted the new Gold Production Cost Standard developed by the Gold Institute as a means of facilitating meaningful comparisons among companies through uniform presentation of all cost data industry-wide.

This table converts the "cash production costs" reported by Echo Bay in all prior years into pro forma "cash operating costs" in accordance with the new standard. In Echo Bay's case, there is no material difference between the two

#### "Safe Harbor" Statement

In accordance with the Private Securities Litigation Reform Act of 1995, we make forward-looking statements in this annual report on a number of pages, including the flap entitled "Highlights" inside the front cover, the inside front cover below the four globes, pages 1-29 and page 33. Forwardlooking statements are those that are not historical facts. They involve risks and uncertainties that could cause actual results to vary materially from targeted results. These risks and uncertainties include but are not limited to significant declines in precious metals prices, which could render projects uneconomic; changes in project parameters as plans continue to be refined; differences in ore grades and tons mined from those expected; changes in mining and milling rates from currently planned rates; the results of current exploration activities and new exploration opportunities; and the conclusions of feasibility studies now under way. Please refer to a discussion of these and other factors in the company's 10-K, 10-Q and other U.S. Securities and Exchange Commission filings, and to current annual production and other targets, updated quarterly, in the company's news releases announcing quarterly results.

### Glossary

The technical terms in this glossary are described to give you a better understanding of Echo Bay's business. If there are other terms that you would like explained, please write to Investor Relations at the address given on page 63.

#### Adit

A tunnel driven horizontally into the side of a mountain or hill to gain access to mineralization for exploration or mining.

#### **Dedicated Pad**

See Leach Pad.

#### **Dilution**

The unwanted but unavoidable inclusion of some barren or low-grade rock along with the ore being mined. This lowers the grade of the mined material.

#### Doré

An unrefined bar of bullion containing an alloy of gold, silver and impurities. Echo Bay ships its doré bars to refiners for further processing, then sells them to precious metals dealers, mainly banks and their affiliates.

#### **Drift**

An underground horizontal passage providing access to a mineralized area.

#### **Drilling**

Blasthole Drilling

The drilling of holes in rock to insert an explosive charge. The drill holes are usually about 10-25 feet apart. The ensuing synchronized blast will break up the rock so it can be dug out.

Diamond (or Core) Drilling
Drilling with a hollow diamondstudded bit to cut out a solid rock
core. A column of rock is extracted
from inside the drill rod for geological
examination and assay.

#### In-Fill Drilling

Drilling between widely spaced holes (typically up to 200 feet apart) to establish or upgrade the ore reserve classification.

#### Rotary Drilling

Drilling with a bit that breaks the rock into chips. The chips are continually flushed up the hole (outside the drill pipe) and are collected in sequence for geological examination and assay.

Reverse-Circulation Drilling
A type of Rotary Drilling that uses a double-walled drill pipe. Compressed air, water or other drilling medium is forced down the space between the two pipes to the drill bit, and the

two pipes to the drill bit, and the drilled chips are flushed back up to the surface through the center tube of the drill pipe.

or the tim pipe.

Step-Out Drilling

Drilling at widely spaced intervals (typically in increments of 300 feet) outward from known deposits to test for extensions of mineralization.

#### **Exploration**

Exploration can be divided into three basic categories:

Grassroots Exploration

Exploration for ore in an area that has the correct geologic setting, although no ore may have been found yet in that precise location.

Headframe Exploration

Exploration for a separate ore body "within sight of the headframe" of an existing mine.

Definition Exploration

Exploration that defines an ore body, or searches for extensions to it, once it has been discovered.

#### **Feasibility Studies**

Determinations of the economic feasibility of mining a deposit, based on progressively greater levels of information. Initial Feasibility (Level 1)

A preliminary estimate of what the economic parameters of mining a deposit are likely to be, based on a particular mining plan, process flow sheet, facility design, infrastructure, and estimated capital and operating costs. A Level 1 estimate usually describes an installation that *could be built*. The deposit is classified as Other Mineralization.

Detailed/Optimized Feasibility (Level 2) A refinement and reassessment of the initial study, based on extensive additional information, detailed engineering, and optimization work. This provides a level of confidence such that a decision to build the project can be made. A Level 2 estimate generally describes the installation *intended to be built.* The deposit is now classified as Ore Reserves.

Definitive Feasibility (Level 3)
Yet a further increase in the level of engineering and other detailed work.
The designs and estimates provided in the Level 3 estimate are for the installation that will be built with minimal modifications. Echo Bay would not normally proceed to this level of detail before making a construction decision unless it were to be required for standalone project financing.

#### **Flotation**

A process for concentrating minerals based on the selective adhesion of certain minerals to air bubbles in a mixture of water and ground-up ore. When the right chemicals are added to a frothy water bath of ore that has been ground to the consistency of talcum powder, the minerals will float to the surface. The metal-rich flotation concentrate is then skimmed off the surface.

#### Grade

The metal content of ore. With precious metals, grade is expressed

as troy ounces per ton of ore or grams per metric tonne of ore.

#### Cutoff Grade

The minimum grade of ore that can be mined and processed economically.

#### **Gravity Separation**

Recovery of gold from crushed rock or gravel using gold's high specific gravity to separate it from the lighter material.

#### **Heap Leaching**

A low-cost *Leaching* process in which ore is placed in a large heap on an impermeable pad. The solvent, a weak cyanide solution, is dripped or sprinkled over the heap and collected at the bottom after percolating through the ore and dissolving the metals.

#### Leaching

The extraction of a soluble metallic compound from ore by dissolving the metals in a solvent. See also *Heap Leaching*.

#### **Leach Cycle**

The average amount of time that ore is leached.

#### Leach Pad

A large, impermeable foundation or pad used as a base for ore during *Heap Leaching*. The pad prevents the leach solution from escaping out of the circuit.

#### Dedicated Pad

A leach pad that is constructed to permanently accommodate one ore heap. The pad forms the tailings pile when economic recovery has been reached and the pad neutralized.

#### Reusable Pad

A pad where ore is loaded and then unloaded at the end of each *Leach Cycle*. The pad, made of durable materials, can be reused continually.

#### Mill

A plant where ore is ground, usually to fine powder, and the metals are

extracted by physical and/or chemical processes.

#### **Milliounce**

One milliounce equals 0.001 ounce. See *Ounce*.

#### Mineralization

Mineral-bearing rock. In this report, mineralization generally refers to the presence of gold and silver established by widely spaced *Drilling*. It is referred to as "Other Mineralization" to distinguish it from "Proven and Probable Reserves." See *Ore Reserves* and also *Other Mineralization*.

#### **Ore Body**

A mineral deposit that can be mined at a profit under existing economic conditions.

#### **Ore Reserves**

For a full description of Echo Bay's Ore Reserves and Other Mineralization, see pages 56-57.

#### Other Mineralization

For a full description of Echo Bay's Ore Reserves and Other Mineralization, see pages 56-57.

#### **Ounce**

Throughout this report, the terms "ounce" and "milliounce" are used as abbreviations for the troy ounce measure of weight. The troy ounce has been used exclusively as a precious metals measurement, probably since the 16th century.

1 troy ounce

= 1.097 avoirdupois ounces

= 31.103 grams

1 milliounce = 0.001 ounce

#### Pad

See Leach Pad.

#### Ramp

An underground tunnel providing access for exploration or the move-

ment of materials and equipment between mine levels.

#### **Recovery Rate**

The percentage of metals recovered in a mineral separation process. Recovery rates vary considerably depending on physical, metallurgical and economic circumstances.

#### Refining

A process of removing impurities from metals by introducing air and fluxes into the molten metal. The impurities are removed as gases or slag.

#### Reserves

See Ore Reserves.

#### **Run-of-Mine Ore**

Uncrushed ore in its natural state just as it is when blasted.

#### Shaft

A vertical accessway to a mine. Shafts are used for the movement of personnel and materials, including ore and non-mineralized rock.

#### Stope

An underground working area where ore is mined.

#### **Stripping Ratio**

In an open pit mine, large quantities of nonmineralized rock often cover up the ore and must be removed. The *Stripping Ratio* is the number of tons of non-mineralized material removed per ton of ore mined.

#### **Tailings**

The neutralized material discarded after the economically recoverable metals have been extracted from the ore by a *Mill* or by *Heap Leaching*.

#### Ton

The short ton is used throughout this report. It is a unit of weight equal to 2,000 pounds or 907.2 kilograms.

## Shareholder Information

#### **Shareholders**

Echo Bay's shares are widely held. No shareholder has a controlling interest in the company. The company has an estimated 65,000 shareholders.

#### **Principal Markets**

In 1996, a total of 342.2 million Echo Bay shares were traded: 160.7 million on the American Stock Exchange, 107.4 million on The Toronto Stock Exchange, and 74.1 million on other exchanges. Echo Bay is listed on these other exchanges: Montreal, Paris, Brussels, Zürich, Geneva, Frankfurt, Düsseldorf and Berlin. Echo Bay's stock trading symbol is ECO.

The high volume is caused by the active trading of institutions that manage investments for pension plans, insurance companies and mutual funds. Approximately 45% of the company's shares are estimated to be owned by institutions and 55% by individuals.

#### **Dividend Policy Change**

Dividends of US\$0.0375 per common share were paid on June 30 and December 31 of 1995 and 1996.

In January 1997, the company announced plans to build two new gold mines during 1997-98 and to suspend payment of dividends on its common shares, applying those funds instead to constructing the new mines. This will provide about \$21 million over the next two years for mine development, based on Echo Bay's prior practice of paying a semi-annual dividend of US\$0.0375 per common share.

The company believes that shareholder interests are best served by using the company's cash resources to build a foundation for sustained future value rather than making short-term cash payouts at this time.

#### **Common Share Market Prices**

	American St	ock Exchange	The Toronto Stock Exchange				
Quarter	High	Low	High	Low			
1996 – 4th	US\$ 9.13	US\$ 5.88	C\$12.45	C\$ 8.00			
- 3rd	11.25	8.44	15.20	11.45			
- 2nd	14.13	10.50	19.13	14.40			
-1st	14.75	10.50	20.25	14.38			
1995 – 4th	US\$11.25	US\$ 8.88	C\$15.25	C\$12.00			
- 3rd	11.50	9.06	15.63	12.50			
- 2nd	10.75	8.75	15.00	12.00			
- 1st	10.63	8.63	15.00	12.00			

### Purchasing Additional Common Shares

The company has an Optional Purchase Plan by which shareholders may increase their investment in Echo Bay common shares. There is a fee, but it is considerably less than traditional brokerage commissions. For more information on this low-cost investment method, please call the Plan Administrator, Montreal Trust Company of Canada, at 800 663-9097 (toll-free from Canada and the United States) or 416 981-9633.

#### **Annual General Meeting**

The annual general meeting of shareholders is scheduled to be held at 11:30 a.m. on Wednesday, May 14, 1997, in Toronto. All shareholders are invited to attend.

#### **Transfer Agent**

Montreal Trust Company of Canada is the company's principal transfer agent and registrar, and maintains all shareholder records for the company. Other transfer agents and registrars are The Bank of Nova Scotia Trust Company of New York and Royal Bank of Canada Europe Limited (London, England).

#### Form 10-K

A copy of Echo Bay's Annual Report to the U.S. Securities and Exchange Commission on Form 10-K is available on request. Please write to Investor Relations at the address below.

#### **Shareholder Records**

Shareholders may obtain information about their shares, lost certificates and other matters from:

Montreal Trust Company of Canada Shareholder Services 151 Front Street West Toronto, Ontario, Canada M5J 2N1

Phone: 416 981-9633 800 663-9097 from Canada

and USA Fax: 416 981-9515

#### **Investor Relations**

Robbin A. Lee Manager, Investor Relations Echo Bay Mines Suite 1000 6400 S. Fiddlers Green Circle Englewood, Colorado USA 80111-4957

Phone: 303 714-8800 800 395-4143 from Canada and USA

Fax: 303 714-8994

E-mail: ralee@echobay.com Internet: www.echobay.com

- London, England
  Corporate director;
  former Vice Chairman,
  Wood Gundy Inc.
  (investment dealers)
- 1,3,4 Latham C. Burns, 66
  Toronto, Ontario
  Corporate director;
  former Chairman,
  Burns Fry Corporation
  (investment dealers)
- 2.4.5 John Gilray Christy, 64
  Wyndmoor,
  Pennsylvania
  Chairman,
  Chestnut Capital
  Corporation
  (holding company)
- 2,5,6 Pierre Choquette, 54
  Vancouver,
  British Columbia
  President and
  Chief Executive Officer,
  Methanex Corporation
  (worldwide production
  and marketing of
  methanol)
- 3,5,6Peter Clarke, 66
  Nanoose Bay,
  British Columbia
  Consultant, metals and
  mining industries;
  former Senior Vice
  President,
  Echo Bay Mines Ltd.
- 2,3,5 Carlos A. Ferrer, 43
  Rye, New York
  Partner,
  Ferrer Freeman
  Thompson & Co., LLC
  (private equity fund)

Richard C. Kraus, 50 Englewood, Colorado President and Chief Executive Officer, Echo Bay Mines Ltd.

Robert L. Leclerc, Q.C., 52 Highlands Ranch, Colorado Chairman, Echo Bay Mines Ltd.

- 3.5.6 Jack F. McOuat, 63
  Toronto, Ontario
  President,
  Watts, Griffis and
  McOuat Limited
  (consulting engineers and
  geologists)
- 1,2,4 Monica E. Sloan, 42
  Calgary, Alberta
  President,
  Telus Advanced
  Communications
  (a telecommunications
  company)
- 1,2,4 **R. Geoffrey P. Styles,** 66 Toronto, Ontario Corporate director; former Vice Chairman, Royal Bank of Canada

Committee members:

- <sup>1</sup>Audit
- <sup>2</sup>Compensation
- <sup>3</sup> Finance
- <sup>4</sup>Nominating and Corporate Governance
- <sup>5</sup>Operations
- <sup>6</sup>Safety and Environment

Robert L. Leclerc, Q.C., 52 Chairman

**Richard C. Kraus,** 50 President and Chief Executive Officer

John L. Azlant, 50 Senior Vice President, Business Development

Peter H. Cheesbrough, 45 Senior Vice President, Finance, and Chief Financial Officer

Robert D. Wunder, 47 Senior Vice President, Project Development

Robert C. Armstrong, 53 President and Chief Executive Officer, Santa Elina Gold Corporation

Mine Management

Ian M. Berzins, 40 General Manager, Lupin

Steve C. Mueller, 51 General Manager, Round Mountain

Jeffrey C. Smith, 43 General Manager, McCoy/Cove

Marv Walker, Sr., 59 General Manager, Kettle River John J. Antony, 55 Vice President, Technical Services

Lois-Ann L. Brodrick, 53 Corporate Secretary

**Scott A. Caldwell,** 40 Vice President, Operations

**C. Brian Cramm,** 44 Vice President, Business Development

**Donald C. Ewigleben,** 43 Vice President, Environmental and Public Affairs

**Terry N. Fiske,** 63 Vice President and General Counsel, U.S. Operations

**Raymond W. Jenner,** 45 Vice President and Treasurer

Michael K. McMillan, 42 Vice President, Human Resources

Gerald A. Tywoniuk, 35 Vice President, Controller and Principal Accounting Officer

### How We Leave

When mining is completed, what do we leave behind?

We plan for that long before we dig the first shovelful. We are *leaders in land* reclamation and mine closure practices.

We integrate responsible environmental policies and sound social principles in all of our business decisions. We are proud of our record.



At Borealis in Nevada, we recontoured disturbed areas, redistributed topsoil, and reestablished groundcovers before returning the land back to nature. Chukar partridges now nest where a mine once was.



At Sunnyside in Colorado, we reclaimed tailings impoundments dating back to the 1930s — generations of miners before us.

We donated the mill to the local Historical Society as a tourist attraction.

